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American Railroad Journal.

Saturday, August 14, 1852.

Quartz Mining in California.

H. V. POOR, Esq.,

Dear Sir: In compliance with my promise, I now proceed to give you the result of my observations and inquiries in California, in relation to quartz mining.

I arrived at San Francisco in July, 1849, but my attention was not called directly to the subject of quartz mining until June, 1851, though I had frequent opportunities, while residing in San Francisco, to read and listen to the reports of those who were engaged in the business, or had visited the mines.

The first discoveries, to any considerable extent, of gold bearing quartz, were made in 1849, in what is known in California as the "Southern Mines," in the Mariposa region, lying east of the *San Joaquin river*, and south of *Stockton*—but it was not long after these discoveries were made, before others were also made on the Moquelumne and Cosumre rivers, in the "*Central* mining region;" and soon after in the "Northern mines," or in the *Nevada* region, between Bear river and the Youba.

At first there were few people who had any confidence in the reports made, in relation to the discovery of gold in the quartz; yet there are *few* men so firmly fixed in their principles of unbelief that they will not be converted when the evidence is made plain to the senses of *seeing* and *feeling*—and thus have *many thousands* become warm advocates of the theory, that the *quartz* rocks have furnished the *mountains* the *canyons* the *gulches* and the *rivers* of California with their rich stores of gold, from which so many have made large drafts during the past few years. Indeed the most skeptical, who sought industriously for truth, became firm believers, and in their turn "*prospectors*," until it is now well understood that, from the extreme south to the north—wherever there are *placer diggings*—the quartz is not far off; and there is scarcely a month in the year that some new and rich development of gold bearing quartz is not made, though it is not unfrequently that much time and money are lost, in seeking for "*rich veins*"—while others, not looking for them, accidentally stumble upon what makes them rich in a day. Indeed accident seems to have more to do in these discoveries, than science or judgment.

The first machinery for working quartz was erected in the Mariposa district in ————, by Stockton & Aspinwall, and by Palmer, Cook & Co., and others, upon the plan of Commodore Stockton—or "Stockton's mill," as it is usually termed—several of which were sent out to California, and put in operation.

These mills were, I believe, originally designed for the gold mines of Virginia and Georgia, where they may have been very successful; but they were, unfortunately, found entirely unsuitable under the circumstances, for California; as it will readily be seen by the following statements:

The Stockton mills sent to California, were designed, or rather were suitable, to be driven by an engine of *eight* to *ten* horse power—though they might be larger—and therefore competent to crush from eight to ten tons per day. We will say *ten tons*. It will probably require to *quarry* and haul ten tons of rock in *Virginia*.

16 men—slaves, of course—at	$1 00	$16 00
2 pair mules	1 50	3 00
2 cords wood	2 00	4 00
2 Feeders	1 00	2 00
1 Superintendent	4 00	4 00
1 Assistant	2 00	2 00
1 Engineer	2 50	2 50
1 Assistant do	1 50	1 50
1 Mechanic	2 00	2 00
Sundries, repairs, etc		13 00
Thus we estimate the expense per day at		$50 00

—and we will suppose that the rock will yield *one cent per pound*—ten tons at $20 per ton—or $200—per day—less expenses $50—gives a net return of $150 per day, which may be considered a good business in Virginia.

Now let us suppose a mill, of the same descriptions, to have been erected in the Mariposa district in California in the spring of 1850; and at the distance of 200 miles interior from San Francisco—to which place you must go for every repair which cannot be made by an ordinary smith or carpenter—when common laborers got from $8 to $10 per day, and mechanics and machinists from $10 to $16. We will employ the same number of men in California as in Virginia, and work the same number of tons of rock, viz:

16 Men at $8	$128
2 pair mules, $8	16
2 cords wood, $6	12
1 Superintendent	20
1 Assistant	12
1 Engineer	16
1 Assistant	12
1 Mechanic carpenter	12
2 Feeders, at $8	16
Sundries	30
Here we find that the expense is	$274

per day, to work ten tons, which, at one cent per pound, does not pay expenses by seventy four dollars per day—and even at *two* cents per pound we get but $400, and only $126 over expenses, which is not enough in California. Many persons who purchased and erected these mills, were sadly disappointed in their *ability* to crush the rock. Where they expected to crush fifteen or twenty tons a day—according to representations made—they crushed perhaps *six*, *eight* or *ten* tons.

Most people, indeed, who have erected quartz mills, have *over* estimated the amount of work to be performed; and it is a common thing to take a large day's work, upon rich ore, and then base the operations of the mill, for three hundred days in the year, upon that day's work; but the safer plan is, in my opinion, to allow *one* day in *each* week for repairs, and five days for work, and then take a *medium* day's work as a basis for calculating results; at least such is decidedly the safer plan.

It must be borne in mind, also, that in California, where reports are constantly circulated of "*new and rich diggings*,"—where men can make "*twenty dollars and upwards a day*," it is no easy

matter to retain men steadily in employ, even at the rates allowed them in this estimate; and thus it is, that many of the early efforts to work quartz rock, by *inexperienced men* with *inefficient machinery*, were unsuccessful—and the opinion became prevalent, that the "*quartz business was a humbug and a failure.*"

In many instances those who engaged in this business embarked all their capital and their credit also in the enterprise, and of course when it was unsuccessful, they were unable to go on and introduce such machinery as they had learned by experience would be successful; whilst others more fortunate in means, or with greater financial skill and enterprise, managed to make material alterations and improvements in their mills and power, and are now doing a very successful business.

I was at Nevada and Grass valley on the last day of April and first days of May last, and visited *thirteen* mills, most of them in operation, and several of them doing, as I have good reason to believe, a very profitable business.

There is scarcely a mill in that region, that has been in operation six months, that has not undergone *one* or *more* material alterations—some of them indeed have been completely remodeled, as their managers have learned experience by practice, and they are now realizing the benefits resulting from their experience, their perseverance, and their enterprise.

It is very probable, indeed I am quite sure, that a mill might be erected at Grass valley for $25,000 which would crush 30 tons of rock per day, five days in each week through the year, at a cost not exceeding $450 per day as per the following estimate.

It must be borne in mind, however, that labor of *all kinds*, and provisions, can *now* be had much cheaper than in 1850, when the first quartz mills were erected in Mariposa.

To work 30 tons per day will require:

Fifty men to provide the rock at.....	$5	$250
Five pair mules.....	6	30
Five cords wood.....	5	25
Superintendent	20	20
One engineer.....	10	10
Two assistants.....	8	16
Two firemen.....	5	10
One carpenter and one blacksmith.....	10	20
Amalgamator	10	10
Five feeders.....	5	25
Sundries.....		34
Here we have an estimate of.....		$450

for crushing 30 tons per day for five days in each week, which at *one* cent per lb. gives $600, and at *two* cents $1200 per day, giving a net profit of $150 or $750 per day, as the rock may yield *one* or *two* cents per lb, and as the rock increases in value, so the net profits will increase—but I consider that it is *quite safe* to make my estimate upon two cents per lb.

There are several mills in Grass valley working at this time about 30 tons per day, and before the year closes, I believe there will be several crushing over 50 tons per day.

There has been another very *serious* difficulty in the business, which was not anticipated by the first operators.—It was thought by most people, that after they had found a vein of gold bearing quartz, and had got a mill erected which would crush ten or twelve tons per day, there was *no further trouble* to be apprehended. It was very soon found that their mode of "amalgamation" or of *separating the gold from the quartz* after it was pulverised, did not obtain all the gold, and in some cases not more than *one-half* or *one-third* of it, as was found by assaying the "tailings," as the fine quartz is called, after it has passed through the mill. Of course this was an unexpected difficulty to be overcome—a difficulty which has prostrated many enterprising men, who had got deeply in debt for their mills, expecting liberal discounts from their "banks" of quartz, when their notes became due—but when the proprietors presented their drafts to their superintendent, his reply was "no funds in hand" and therefore their notes for machinery, labor etc., could not be paid at maturity.

But that difficulty has been to a considerable extent obviated by improved amalgamators, and most assuredly there will soon be important improvements made in this department of working quartz, as there is at this time a great amount of *mind and capital* directed to the subject. It is a matter of vast importance to the community, equal at least, to that of the *locomotive* in 1832, and it is sure to meet with equal success in a much shorter period.

Indeed before I left California an improved method had been introduced into several mills, by which the amount of gold saved, as I was informed, was in *one* instance as 2 ounces and 11 pennyweights by the old method, to 7 ounces 6 pennyweights by the new;—working the same rock and conducting the work of three stamps into each mode of amalgamation.

I have also heard from various sources since my arrival here, of several new—*and each one* "*the best possible*" mode of saving the gold—but as *experience only, on a large scale* can satisfy me and other practical men, of the value of new methods, I shall do all in my power to aid in their having a fair trial.

When at Nevada and Grass Valley, on the first of May last, I visited thirteen mills, and examined them with care, taking notes in relation to all of them, which I might give entire, but I prefer to give only brief extracts in relation to three mills, viz: the "*New Helvetia* Company," the "*Grass Valley Quartz Mining* Company," late John A. Collins & Co., and the "*Gold Hill* Company."

The first of these mills is under the management of Dr. Bacon, a gentleman of experience in the Georgia gold mines; it has 8 stamps 8 inches square, weighing 450 lbs. each, driven by a ten-horse power engine, crushing from 8 to 10 tons per day of 24 hours, and taking out gold to the amount of from $600 to $1200 per day, according to the quantity and quality of the rock worked. I was informed, when there, by Dr. Bacon himself, that they had taken out, the week previous, $7,256, or over $1200 per day—while there expenses could not have reached $300 per day—thus giving a clear profit of over $900 per day; but this was, I imagineing, more than an average yield. They probably worked harder than usual, as they had recently purchased a part, 6-11ths, of a very rich vein at $38,000, and had a large amount of money to pay in a few days; and they worked hard to get the amount out of the vein in time to meet the payment; in which they were successful, as I have been informed since my arrival here; and I have also been informed that after taking out over $60,000, the parties sold out their interest for $72,000, which shows that there is little apprehension of deficiency of either rock or gold.

The second mill to which I shall refer is that of the Grass Valley Quartz Mining Company, formerly owned by, and better known as J. A. Collins & Co.'s mill—now under the management of Mr. J. L. Crossett—which was first put at work in May, 1851, with *five* stamps 8 by 14 inches square, weighing 700 lbs. each. The number of stamps has since been increased to *ten*, and they are driven by an engine of about 30 horse power, and they will crush 30 to 35 tons per day. Mr. Collins says they can crush 40 tons per day, but I prefer to give what may be considered the *usual* working business of the mill. They *have* taken out over $3,000 from the work of 24 hours, but that was probably an uncommon yield, yet the regular work of this mill is over 25 tons a day. Mr. Collins, as I understand, sold out his interest in this mill last fall, and organised another company called the *Manhattan* Quartz Mining Company, and has purchased and sent out machinery of great power, which he intends to have in operation by the first of January next, thus proving that his confidence in working quartz is by no means diminished.

The *third* mill which I shall refer to, now in operation, is called the "*Gold Hill Company's Mill*," an exceedingly well arranged mill, with *eighteen stamps* 6 inches square, weighing about 600 lbs. each, driven by an engine of about 30 horse power, and crushing, as I was informed, on an average, over 25 tons per day, said to yield from $30 to $60 per ton. But, as I was a stranger, those in charge seemed not disposed to be communicative, and I, therefore, obtained very little information except what I got through the medium of the eye and my *pocket rule*; yet, I was favorably impressed with the mill. These three mills are all of them, as well as *several others* that I visited, doing a profitable business; while others, for want of *power* and *experience*, and means to improve their machinery, are not doing as well.

I have thus far spoken mainly of what has come under my own observation, and of what I have learned by enquiry—upon which I placed confidence—in relation to the working of quartz up to this time, basing all my calculations upon *one* and *two* cents per pound.

It should be *distinctly* recollected, however, that there are veins now worked which *average* 3, 4, and even 5 cts. per lb. I have endeavored likewise to show the importance of improved and more powerful machinery for crushing quartz rock—and I have reason to believe that, within a year from this time, there will be several mills in operation as much superior to the *best now* in use, as they are superior to those first put up in California. If so, then it will be no uncommon thing for them to crush *one hundred tons* in 24 hours.

With mills of power sufficient to crush *fifty* to *one hundred* tons a day, and with improved *amalgamators* which will obtain *all* the gold, when the rock is pulverised, we may confidently anticipate the most satisfactory results from working the quartz veins of California.

But, possibly some of your readers may enquire if there is rock in sufficient quantities to keep *many* mills, of this capacity, in operation for any considerable length of time. In reply to this enquiry, I will give the opinions of men of science and research on the subject.

Professor Blake, who has devoted much time to the subject, says:

"There can be no doubt but that the quartz veins of California are capable of furnishing a supply of gold, which it will probably take centuries to exhaust, and the amount of which is far beyond the limits of calculation, at least with our present data. Scattered over a belt of land, ten miles broad, and running the whole length of the country, north and south, these veins are evidently deposits of immense riches. Setting aside the extraordinary

yields, where some huudreds of thousands of dollars have been obtained from holes ot a few feet square, we still have hundreds of miles of veins from which ore can be obtained, yielding from two to six cents to the pound, and from which a powerful machine can extract one or two thousand dollars a day. When these veins are exhausted there will remain many others which will be profitably worked, when labor shall be cheaper. *There can be no doubt but that quartz mining is destined to be the most permanent source of gold in this country*; and it will not be many years before it will attract that attention which as an investment for capital it evidently deserves. * * * * *

He also says that—

"The richest veins of quartz that have yet been worked to any extent, are those of Carson creek and Grass valley near Nevada. At the former of these places the gold has been found not only generally disseminated through the rock, but also in large masses some of which have weighed as much as 18 pounds. From the most reliable information I could collect on the spot, I believe as much as $300,000 have been taken out of one hole of 15 feet on the vein, and which has not been sunk lower than twelve or fifteen feet. * * * * At Grass valley very rich quartz has been found. In many specimens that I have seen the quartz might have been said to be literally imbedded in the gold, rather than the gold in the quartz."

Professor *Spiekcer* says—

"The California gold mining region proper, that is to say, where active operations are being carried on, extends, at present, from the Mariposa river on the south, to the Klamath river, the boundary line of Oregon on the north, running in a south-east and north-west course, a distance of nearly five hundred miles, and consists of the spurs and foot range of mountains of the Sierra Nevada."

Here we may safely rely upon an ample supply of gold bearing quartz, for all the mills which are likely to be erected during the present generation.

The district of *Volcanoville*, in Eldorado county, where I have been residing during the past year, is yet scarcely known abroad as a *quartz* region —as it required considerable time to develope its true character; but it may, in my opinion, be considered as one of the richest, and most promising localities in the State; some of the most convincing evidence of which may be examined by those who will take the trouble to call on me at the Howard Hotel. D. K. MINOR.

New York, August 10th, 1852.

Public Lands of the United States.

The number of acres ot the public lands in the States and Territories unsold and undisposed of on the3 0th of June, 1851, was 1,400,632,305, distributed as follows:

States and Territories.	Acres undisposed of.
Ohio	302,195 62
Indiana	1,049,680 91
Illinois	8,219,628 22
Missouri	26 635,589 32
Alabama	15,486,849 23
Mississippi	8,849,165 11
Louisiana	13,579,348 47
Michigan	20,011,134 77
Arkansas	22,303,746 72
Florida	32,863,518 66
Iowa	25,661,550 27
Wisconsin	24,506,294 83
California	120,477,840 00
Minnesota Territory	50,075,931 85
Oregon Territory	206,349,333 00
New Mexico Territory	127,383,040 00
Utah Territory	13,589,013 00
Northwest Territory	376,040,960 00
Nebraska Territory	87,488,000 00
Indian Territory	119,789,440 48
Total	1,400,632,305 00

At the lowest government price, $1 25 per acre, these lands amount to $1,750,790,380.

Mobile and Ohio Railroad.

CIRCULAR OF THE BOARD OF DIRECTORS.

Mobile, August 2, 1852.

The Directors of the Mobile and Ohio Railroad Company, having made provision for the grading, masonry, bridging and other local work of the entire line of this road, from Mobile to the Ohio river, (with the exception of a short link in North Mississippi and Tennessee, where subscriptions are sufficiently advanced to ensure the necessary am't before the first of October next,) propose, in pursuance of their original policy, to oller the six per cent bonds of the company, in London, having from twenty to thirty years to run, to the amount of five million dollars, or as great a portion thereof as may be required for the purchase of iron, equipments, etc., sufficient to place the whole road in full working operation.

Preparatory to entering the market for the first time as borrowers, and for the better understanding of the nature and value of the securities which are to be presented to the consideration of foreign capitalists, as a basis of credit; the following brief exhibit of the origin, progress, resources and prospects of the company is submitted:

In the month of February, 1848, favorable charters were obtained from the States of Alabama, Mississippi, Tennessee and Kentucky, for the construction of a railway from Mobile, on the Gulf of Mexico, to a point at or near the mouth of Ohio river, by a company, under the corporate title of "THE MOBILE AND OHIO RAILROAD COMPANY." In May thereafter, books for subscription were opened at Mobile, and a sufficient amount of stock having been taken, the company was organised, June 7th, 1848, by the election of its first board of directors.

The first step of the directory, was the institution of a thorough instrumental survey of the country to be traversed by the road. Such a survey was commenced in October, 1848, under the immediate direction of John Childe, Esq., Engineer in Chief, with an efficient corps of assistants; was finally completed in the Autumn of 1849, and the results fully reported to the stockholders at their second annual meeting, July 5th, 1850.

The survey developed the fact, that the country, from Mobile to the mouth of the Ohio river, was eminently adapted for railroad purposes; presenting no natural obstacles in the way of a cheap, direct and level highway between the termini; crossing no navigable streams, but running parallel with the rivers, and upon dividing ridges elevated and beyond danger from freshets. Notwithstanding the favorable report of the Chief Engineer, and while the great feasibility and importance of the undertaking was everywhere admitted; yet the magnitude of the work, its ascertained cost, the apparent remoteness of its accomplishment, and the general indifference of the people of the interior, not then awakened to a spirit of railroad enterprise, rendered the task of accumulating means and confidence a work of time and difficulty.

The directors, however, well assured of the extraordinary merits of the undertaking, determined to proceed with such means as they could command, and accordingly thirty three miles of the road, extending north from Mobile, were placed under contract, and the work of construction commenced. Meanwhile, application was made thro' the State Legislatures, and by the company, to the Congress of the United States, for a grant of government lands, to aid in the construction of this road. That body, promptly recognising in this enterprise a work of high public consequence, forming in conjunction with the Central road of Illinois, a grand national thoroughfare, donated to the States of Alabama and Mississippi, alternate sections of the public lands, for six miles in width, on each side of the road traversing those States. This munificent donation was accepted by the States, and by acts of their respective Legislatures, transferred to the use and benefit of the stockholders of the company. The effect was most auspicious. Public confidence, before withheld or wavering, became decided in favor of the ability of the company to carry through, with this aid, the work which they had undertaken; and the efforts of the directors to obtain stock were promptly responded to by liberal subscriptions. They have been thus enabled to take up the whole as an unit; to secure the means for the local work; and to perfect their plans for the simultaneous and rapid preparation of the roadbed throughout its whole extent.

The line is now finally located, and after a resurvey and carefully revised estimates upon the actual location, the entire cost of the road, including superstructure 65 lbs. per yard, depots, station houses, machine and repair shops, equipments, etc., etc., ready for full and active working operation, is estimated by the chief engineer at $9,750,000, or adding to the sum for extra contingencies, in round numbers, $10,000,000.

The resources in the hands of the directors, for construction, may be stated as follows:

Thirty-three miles completed by Mobile subscriptions, costing	$500,000
Real estate tax in Mobile, two per ct. per annum for five years (assessment $11,500,000 for 1852	1,100,000
Proceeds sales village lots at 13 and 33 mile stations	50,000
Private and county subscriptions in Alabama and Mississippi, (county subscriptions payable from special taxes each year	1,305,000
Do. do., Tennessee and Kentucky	700,000
	$3,655,000

Making the total resources thus far available for the construction of the road bed $3,655,000. In addition the entire right of way has been obtained for the road—in most cases having been freely given, without cost to the company; while for a nominal sum a large and valuable depot ground—forty acres in extent—has been secured in Mobile, together with a valuable water front and extensive and commodious wharf privileges at the north and south parts of the city.

Beyond the means thus provided, and subscriptions now in progress, the sum of five million dollars will be ample to cover the entire construction account, and place the road in complete and profitable operation. An act of the Legislature of Tennessee, at its last session, authorises the endorsement by that State of the company's bonds for eight thousand dollars per mile, upon the portion of the Mobile and Ohio road passing through Tennessee. This endorsement will amount to about one million dollars.

The purchasers of the bonds of the company will receive as guaranty and security for their payment at maturity—

(1.) A first and only mortgage lien upon the whole road of five hundred and seventeen miles in length, [including the branch of 23 miles to Tennessee river,] together with all its appurtenances, machinery, fixtures, etc., costing say ten million dollars.

(2.) An endorsement by the state of Tennessee upon one million dollars of these bonds.

(3.) A first and only mortgage lien upon one million acres of Government lands, donated in aid of the road, and located within fifteen miles of the track in the states of Alabama and Mississippi, worth, when the road is completed, an average of three dollars per acre, or three million dollars.

An examination of the peculiar features and characteristics of the route of the Mobile and Ohio railroad, will at once establish its value as an investment, and its soundness as a security to the extent applied for.

1. It is, and will be for all time, the shortest practicable route between the Ohio river and the Gulf of Mexico, being only eleven per cent longer than an air line.

2. It will be a north and south line, crossing the parallels of latitude, and extending by its connection with the Central Illinois line, from one extreme of the Union to the other, crossing over twelve degrees ot latitude, and the consequent variety of climate and production.

3. It will be nearly a straight road, having few curves, and those of large radius; with a maximum grade moving south, not exceeding thirty feet to the mile, and going north not exceeding 40 feet to the mile; thus giving it a higher capacity for cheap, certain, speedy and heavy freight transportation than any other long road now constructed.

4. The great length of this road under a single management; the absence of large streams upon the route, rendering it less liable to disaster from high

water; the mild climate, and freedom from the action of frost; and other favorable circumstances, will combine to make its net annual income larger in proportion to the gross receipts, than is possible upon the best managed roads of the northern states.

5. Long lines of railway now in progress, east and west, will cross this road at various points, making it the most accessible and convenient route of transit to the Gulf for a vast area of country. One hundred and twenty miles north of Mobile the Alabama and Mississippi railroad will intersect the Mobile and Ohio road, forming westwardly a continuous line to Vicksburg, Mississippi, and eastwardly to Charleston, South Carolina. About two hundred miles further north, the Memphis and Charleston railway will also connect this road with Memphis, Tennessee, and the various lines eastward to the great thoroughfares of the Atlantic slope of the Alleghanies In north Mississippi, a branch diverging to Nashville, Tennessee, again divides north of that city into two important lines, extending to Louisville, Cincinnati. In Tennessee, one branch rests upon the Ohio, at Paducah, and another terminates on the Mississippi, at Columbus Kentucky, while the main stem to Cairo unites with the Central road to Illinois, and forms a connection with an extended network of railway, spreading over the whole western valley, and converging towards the Gulf, upon this great trunk line.

6. This road will pass, for one hundred miles over a heavily timbered country, abounding in lumber of excellent quality, for which Mobile is rapidly becoming a large market; and after leaving the forest, will strike one of the most fertile cotton regions of the south; again leaving which, it will enter the wealthy grain-growing districts of West Tennessee. The local traffic which will be furnished by the wealthy country immediately dependent upon this road for an outlet to the sea, will alone make it a profitable line for the stockholder.

7. The cost of the road will not exceed the estimates. They have already been verified in part by the completion of 33 miles of the work at $1655 per mile less than estimated, and the further contract of 55 miles, also at rates within the figures of the chief engineer; and from the abundance of provisions the coming year, now rendered certain by the favorable season, a fair prospect exists of making a greater saving upon the contracts soon to be offered.

8. The estimates of business and income are rather under than over the mark. They are based upon actual data of the products, commerce, population, etc., of the counties dependent upon the road; and are made by an officer of large experience, sound judgment, and thorough knowledge of railroad affairs, whose approximations heretofore have been found remarkably correct. In his official report to the directors, Mr. Childe estimates the net income of this road at 14¼ per cent upon its cost, and says: "From a careful examination of the country, its products, and present tedious and expensive modes of reaching the markets, I feel great confidence that the road will, in no case fall short of the amount of traffic and income stated above for the first year, commencing six months after the divisions shall be fully and respectively completed."

9. The road is now in active healthful progress. As stated, above 33 miles are completed and in operation; 55 miles more of the line is under contract for the graduation, masonry and bridging, upon which a large force is now actively employed; 179 miles further is advertised, and will be contracted before 1st October next; and the remainder of the line to the Ohio river at an early day thereafter. By the time the iron can be laid down in Mobile, the most forward sections will be ready to receive it, which will enable the company to bring the southern portion of the road into early profitable use, and provide for the first instalments of interest upon their loan from its earnings, thus retaining the principal nearly unimpaired for purposes of construction alone.

The directors feel satisfied that, for the reasons herein set forth, a mortgage upon the road itself would constitute an abundant and ample security for a loan of the amount required, namely $5,000,000, or about one half its cost.

But they propose to offer the additional guarantee of the credit of the state of Tennessee for 20 per cent of the entire loan, as provided by act of her legislature—a state whose securities (6 per cents) are now quoted at 109¼ to 110, or nearly ten per cent above par. This recognition by Tennessee of the Mobile and Ohio road furnishes evidence, to which the directors could add nothing, to increase its weight, or commend it more strongly to consideration.

Again, and in addition to these, the company holds large and valuable tracts of land bordering upon the road, the gift of the general government, containing about one million acres. A portion of these lands is covered with heavy forests of valuable timber; another portion embraces excellent cotton lands; and the whole is equal in fertility to the average of the country through which the road passes. These lands at the lowest valuation, will be worth, the moment the road shall be completed, fully one-half the amount to be loaned to the company, or one-fourth the entire cost of the work. If withheld from sale for a few years after the completion of the road, it is believed that a much larger sum may be realized from their disposal, estimated at 40 per cent of its cost, or four-fifths the amount of the company's proposed loan. A first lien upon these lands will also be given in trust to the bondholder, as security for the loan.

The basis of credit with the company has thus established, as briefly set forth in this communication,—into the correctness of which in all particulars the closest scrutiny is invited and desired—and the perfect and complete security that is offered, will, the directors feel assured, attract the attention of capitalists, and place the bonds of the company where they of right belong, upon an equal footing with the best first class securities offered in any market.

NOTE.—The county subscriptions mentioned upon page 3 are to be collected by special tax, levied for the purpose, and not by the issue and sale of county bonds. The Mobile tax it is now believed will yield nearly $1,500,000 in consequence of the rapid improvement in real estate, upon which the assessments are made.

Louisiana.

New Orleans, Opelousas and Great Western Railroad.—The Speech of Buckner H. Payne, Esq., at the Little Rock railroad convention, 5th July, 1852, has excited much interest among the friends of internal improvements at the South, particularly the citizens of New Orleans and St. Louis as well as those of the State of Arkansas, to whom it was addressed. After stating the fact of the organization of the New Orleans, Opelousas and Great Western railroad company, the subscription among the citizens of New Orleans of $750,000, the passage of a resolution by the City Council of New Orleans, under an act of the State, providing for raising a million and a half to be paid by taxation, and that the parishes through which the road runs are pledged to subscribe by a tax as well as private subscription an amount equal to that obtained in the city for its construction, Mr. P. expresses the confidence, that these means amounting to over four millions of dollars, will be found sufficient to build the main road from Algiers, opposite New Orleans, to the Texas line near the 32° of latitude, and a branch to the boundary between the States of Louisiana and Arkansas.

The proposed branch of the New Orleans, Opelousas and Great Western railroad across the State of Arkansas, through Camden and Little Rock on its way to St. Louis, would be 238 miles long, viz: From the Louisiana line to Little Rock 120 miles; thence to the Missouri line 118 miles; making, as stated, 238 miles of road to be built by Arkansas.—The country through which it will run is level, and the cost of its construction will not exceed $10,000 per mile, making the cost of the road $2,380,000. The length of a branch thrown off at the proper point to Memphis would not exceed seventy-five miles. This, at the estimated cost of your Engineer, Mr. Robinson, of $12,000 per mile, will make the sum of $900,000. Another branch taken off at Camden to Fulton on Red River, a distance of fifty-six miles by Langtree's map, will cost say $560,000, as it runs through a level country. Now adding these sums together, and we have $3,840,000 as the cost of the St. Louis and New Orleans road through Arkansas, with branches to Memphis and Fulton.

The construction of this road is compared with that of the "Central railroad" contemplated by the State of Arkansas both as it regards expense and probable advantages. The cost of the Central road from Memphis by way of Little Rock and Fulton to the Texas line is estimated at $4,656,000. Mr. Payne goes on to say—

Memphis and Fulton are the two main points of the central, and they are developed by the proposed branches. But this Central railroad gives no outlet for the mineral resources of your State. It will cost double that of the New Orleans and St. Louis road, and *it takes nothing to market.* Its effect will be, if first made, to destroy all your mineral wealth for years to come, because it will absorb all your present means for constructing railroads; and when constructed, this road will afford no outlet for your minerals, as they will not bear re-shipment, transhipment nor storage. The handling of them at Memphis will cost more than they can afford to pay; and as for cotton, instead of being taken *to* market, it is actually transported further *from* market. From southern and western Arkansas it is almost as near to New Orleans by railway as it is to Memphis. The cost of railroad transportation will be about the same to either; but the planter who ships to Memphis is 1200 miles from market, and has paid as much to get there as the one pays to get to New Orleans.

The trade of St. Louis and New Orleans, opened by this road to Arkansas, cannot be otherwise than of vast importance to her citizens. On the north it gives them all the supplies of Western produce and manufactures, and opens the whole agricultural and mineral resources of the State. On the south it gives them the market of New Orleans at all seasons, without subjecting them to the cost of transhipment, reshipment or storage, and consequently the avoidance of injury from rehandling of cotton and other merchandize. It will also relieve the small planter from the necessity of selling his few bales of cotton in an inferior market, by securing to him at less expense the advantages of the best. But besides these advantages, great as they are, it will open to Arkansas *the* market, and the *only* market she can have for her mineral wealth, and which must be dead and valueless to her unless this road is made, by which they can be brought to New Orleans. Any one acquainted with the uses to which her minerals must be necessarily applied, must also know that New Orleans is her only market. Iron for heavy machinery, for steamships and boats, for manufactures, for engines, for locomotives, for railroads, etc. etc., her lead, her zinc, copper, coal, granite, marble, slate, nickel and mineral paints, etc., *all must have their market in New Orleans.* This road, therefore, is essential to Arkansas. Without it her people can have no outlet that will justify the working of these mines. Crossing all your streams, as this road would at right angles, it secures to people the advantage of reaching it from above and below with their produce, at any time.

The following are laid down as the general principles governing railroad improvements.

First.—That all railroads beginning at any great commercial city on the seaboard never fail, if persevered in, to be good paying stock.

2. That they never fail to advance the commercial prosperity of that city.

3. That they advance the value of the landed estate or property of the city and country through which they pass from 100 to as high, in some instances, as 5000 per cent.

4. That no matter how far the road is extended, or how many branches it may have, the extension, and the branches, equally impart such value to the country developed by them.

5. That the company building such road, if pro-

perly managed, never break, nor the stock becomes valueless.

Witness: The railroads from Boston, New York, Charleston and Savannah, and the same in Europe.

Second.—As a general rule, all railroads not terminating on such commercial point, nor directly connecting with one that does, fail, and the company breaks, and the stock becomes of little value.

2. That they neither build up the town they terminate in, nor do they add much, if anything to the value of the property of the country through which they pass.

3. That the exceptions to this route are so few, or have some special local cause to account for it, that it might almost be said to be invariable, as it is certainly generally true.

Witness: All the New England railroads outside of Massachusetts—they broke—and their stocks became of little value until they formed connections either with Boston or New York, or both. Also, the Vicksburg and Jackson, the Natchez and Jackson, the Bayou Sara and Woodville, the Port Hudson and Clinton, etc., etc., here at home are living and *dead* proofs of its truth.

Third.—That the railroads of States distant from the great commercial seaboard market, but connecting with the main trunk leading to that market, are also good paying roads, and possess the power of enhancing the value of the country developed by them.

Witness: The New England roads since their connection with Boston, the Michigan, Northern Ohio, Indiana and Illinois railroads connecting with New York, etc., etc.

Fourth.—That where railroads have been constructed in violation of these principles, the companies have failed, and consequently if disregarded in future they will continue to fail.

Fifth.—That this is so well understood by all bankers of any note, that roads starting from, or directly connecting with such great commercial seaboard mart, receive moneyed facilities which are invariably denied now to roads where no such connection exists.

Sixth.—That all transhipments, reshipments and delays from physical causes must be avoided, and the road made as direct as possible.

Seventh.—That geographical and local causes, such as a wide extent of country aggregating from natural facilities the produce and merchandize upon a particular point *in the interior*, serve to make that point or city one from which railroads may radiate, and produce good effects upon the value of its property and that of the country through which they pass, if not counteracted by special local obstacles.

Eighth.—That where the principles here set forth have been disregarded, the country has been retarded in its growth and prosperity, and a distaste and aversion to railroad improvements engendered in the minds of the people in consequence.

Ninth.—That, as a general rule, it may be affirmed that all railroads not connecting directly with the great seaboard market of the country fail, and the company breaks.

Tenth.—That at the first all railroads must necessarily be *local* and *sectional*, but although local and sectional.

Eleventh.—That prudence demands and success requires, that, in order to obtain the greatest amo't. of benefit from railroads, they should be so located that their extension may bring about such connections with other roads, and other sections, as will convert *local* roads into *State* roads, and State roads into *international* and *national* roads.

Twelfth.—That railroads when so constructed, starting from the great city and market where the produce seeks its sale, and the country its supplies, never fail to add to the value of real estate of both city and country.

When the road is completed as far as the Texas line, that State proposes to grant a sufficient quantity of land to complete the road as far as El Paso on the Rio Grande. If this State is as liberal as it is said she will be, the road to El Paso will be built in five years. From El Paso to San Diego, the disance is 613 miles, this portion Mr. P. considers, will be built by Congress or else grants of land will be given by them to the company to aid in its construction. From El Paso to the Pacific there is but one mountain to cross in order to reach the waters of the Gila. The crossing of this mountain only 604 feet in elevation will be at the gold-copper mines discovered by the Spaniards in 1604, and worked since 1608 to the present time.

The importance of the two great termini of the St. Louis branch are glowingly summed up, and the people of Arkansas exhorted to help, for their own sake, in opening the means of communication between these great centres of trade.

By looking at the map of the United States, it will be perceived that New Orleans is the geographical and commercial seaboard centre, between the Atlantic and Pacific States. That from the crest of the Alleghanies on the east, to the crest of the Rocky Mountains on the west, and our *present* boundary on the north, there are 1,921,146 square miles, drained by the Mississippi river and its tributaries; of which New Orleans is the natural outlet and market. That the Mississippi river and its tributaries furnish an inland navigation *over* one hundred thousand miles long. It is an old saying and true, that we can *aid* nature, but cannot reverse her laws. It is equally true, that we can aid commerce, but cannot reverse its laws. Railroads can aid commerce, and can aid the Mississippi in her natural powers in bringing the commerce of this vast country to New Orleans; but to reverse it, *can never be accomplished*—if we are true men.

The hundreds of millions of gold produced by California: the rapid development of our possessions in Oregon; the great increase of the whale trade in the North Pacific; an increased trade with Mexico and South America; the absolute certainty of finally crushing the Chinese walls and overthrowing Japanese nonintercourse; and the opening of commercial relations with 700,000,000 of people who inhabit Asia, and the millions of the islands of the Pacific; and the bringing of that commerce to New Orleans for distribution among our people and that of Europe, or for exchange for our products and manufactures, will furnish to this road and its St. Louis branch a transportation and business unknown to the annals of railroad prosperity on this globe. The speed of railroad cars in England has reached fifty miles per hour. We can accomplish it on this road. The distance by railway from New Orleans to the Pacific is 1,643 miles. It can be passed in thirty-three hours! and from St. Louis in the same time. This renders it important that the St. Louis branch and the main trunk road should be conducted by one board of directors, connecting as it will with the Pacific trunk. This acceleration of transit, and the perfect security of life and property, it is certain that commerce would no longer undergo the expensive, tedious and perilous voyage of months around Cape Horn, nor even that of weeks across the Isthmus of Tehuantepec or Panama, but would pass this road, and pour millions into the country, as well as the coffers of the company. The voyage from Europe to New Orleans can be performed in ten or twelve days; from New Orleans to the Pacific in a day and a half; from the Pacific ports to China in ten or twelve days more; thus performing in twenty-five days, a trip that has usually heretofore taken from five to seven months.

If the price of passage were fixed at fifty dollars to the Pacific, (only *one-seventh* of the price now charged to California,) with 150,000 passengers annually going, it would produce $7,500,000; and as many returning, would make the income of the road $15,000,000, to say nothing of other business and way travel; and the whole road would not cost over $30,000,000 to San Diego from New Orleans.

Any man acquainted with the geography of our country must see that from the natural position of St. Louis that she has thirty times the extent of territory whence produce must aggregate upon her, than either of the others, and to which supplies are to be distributed. New York, with all her railroads and canals, including all the commerce of the lakes and that of Ohio, Indiana and Illinois, most convenient to the New York market, together with the whole of Michigan, has only 186,500 square miles of territory whose commerce is aggregated upon that city, while St. Louis has Missouri, Iowa, Wisconsin, Nebraska, Minnesota and that part of Illinois convenient to her, together comprising 979,959 square miles, besides the Northwest Territory, lying between Minnesota on the east, the Rocky Mountains on the west, Nebraska on the south and the British possessions on the north, estimated to contain 725,248 square miles more. This great extent of country of a million of square miles, must, from its inland position, have some point nearer to them than the seaboard market, upon which their produce must and will be centralized, and from which their supplies of groceries and merchandize must be obtained, and *that point is St. Louis.* From her very position, in reference to the country here mentioned, and her connection by railway with New Orleans, she is destined to be the *greatest inland city of this continent.* What the trade of such a city will be, connected with such a country and with New Orleans by railroad, is impossible to tell. We leave it for the imagination to picture. Such, however, is the place to which we wish, at the earliest moment, to see constructed a railroad from New Orleans. The travel and trade upon this road, to and from New Orleans, must surpass that of any road in the world.

Steam Communication Between England and Canada.

We yesterday had the gratification of announcing the completion of arrangements between our government, the city of Portland and the American and Canadian branches of the St. Lawrence and Atlantic railroad company, on the one hand, and a Liverpool firm on the other, by which the great desideratum of a regular fortnightly steam communication between that city and the St. Lawrence, has been secured—the vessels to ply to and from the St. Lawrence in summer, and the Atlantic terminus of the railroad, Portland, in winter. We are since indebted to Mr. Bellhouse, (late of Liverpool, and formerly of the firm of Budden and Vennor of this city,) who will be the resident agent in this country of the line, for further particulars of the contract just completed by him with our government and the other parties mentioned above. The Liverpool firm, for whom Mr. Bellhouse acts, is, we find the house of McKean, McLarty & Co., the pioneers, we believe in the great Mediterranean steam navigation, and consequently, thoroughly experienced in all matters connected with ocean steamers. This firm in their Atlantic steam navy, will, we understand, be associated with other large capitalists, as well as with two of the most eminent engineers in Scotland, and two of the most successful builders of iron steamships in that country, so that their perfect ability to perform their part of the contract is placed beyond all doubt, whatever may be the result of the undertaking.—That the result will be highly favorable to all parties concerned, we can see no reason to doubt; more especially, now, that we have learned the very judicious terms to which the contractors have bound themselves, and which, if vigorously carried out, can scarcely fail to give them an immense business, both as to passengers and freight. As we stated yesterday, the vessels to be placed on the line are to be in speed and class equal to any afloat, and are not to be under 1400 tons burden, but will, more probably range from 1800 to 2,000 tons. They are to be propelled by screw paddles, and the maximum rates for passage and freight are to be as follows:—For first and second class passengers who will be found in every thing on the passage excepting wines and liquors respdctively, twenty and twelve guineas; and for third class or steerage passengers, six guineas—these last being provided with three substantial meals *per diem*, finding their own bedding, linen, etc. For the passage to Europe the rates will be proportionally reduced. Freights outward are not to exceed £3 per ton for fine, and £2 for coarse goods; and from America to Europe will not exceed the average rates charged by sailing vessels. On these terms, and considering the comparative shortness, and expedition of the passage, we cannot doubt that the Liverpool and Quebec line of steamers will attract a very large share of the business between the two continents. With a view to securing a portion of the vast emigrant transit from Germany, and other parts of the conti-

nent, to Western America, it is the intention of the company, to establish agents in all the leading cities of Europe, as well as in Great Britain and Ireland, who will be prepared to arrange passages, not for Quebec and Portland alone, but through to Chicago, and other principal points in the interior of America. Such arrangements, ably carried out can scarcely fail to secure to our river and inland waters a large share of this lucrative trade. On the whole, we think we may safely congratulate the country on the favorable terms upon which our government have effected this contract, nor must we omit stating that Mr. Bellhouse expresses himself much indebted for the liberal and business-like manner in which throughout the negotiations, he has been treated by our government, and especially for the aid given him by the Hon. Mr. Young, in making his arrangements with the railroad companies and the city of Portland.—*Montreal Herald.*

New Feature in the Business of Boston.

Sixteen cars loaded with eight sticks of timber, for ship masts, 84 feet in length and three feet in diameter, loaded in Buffalo, were yesterday brought over the Buffalo and Rochester railroad, Rochester and Syracuse, Syracuse and Utica, Utica and Schenectady, Schenectady and Saratoga, Saratoga and Washington, Rutland and Washington, Rutland and Burlington, Cheshire, Fitchburg, Grand Junction, to East Boston, and thence over the Eastern railroad to Portsmouth, N. H., 628 miles without change of cars. Four car loads of slates were also brought at the same time over the Rutland Cheshire and Fitchburg railroad to the Grand Junction depot at East Boston, from the slate quarry recently opened at Fairhaven, Vt.- *Boston Courier, Wednesday.*

Lackawana Coal, and Railroads.

We copy from the Buffalo Courier the following interesting notice of this celebrated coal, and of the railroads which are to supply central and western New York with fuel:

"Bituminous coal, from the mines of Pennsylvania and Ohio, has been used for some years, on the steamboats navigating our western lakes. It was a decided improvement on wood, saving greatly in time, room and labor. The completion of the Erie railroad, and of the lateral routes connecting with it, has been the means of introducing during the present season Anthracite coal, from the mines recently opened at Scranton, Pennsylvania.—And this coal will undoubtedly, from its great superiority over every other kind, supersede the use of bituminous coal.

Where is Scranton? Go to Binghamton, all know where that is; fifteen miles east of it you will find a railroad running south, get on to that and travel fifty miles, and you will arrive at the termination of the road, and at Scranton at the same time. Here you will see a busy population disemboweling the earth, on one side digging out coal, on the other iron-ore, furnaces in full blaze, trip-hammers pounding away with the aid of steam, railroad iron in process of rolling out, and every indication of a thriving, happy and contented people. From this spot comes the Scranton coal. Formerly this place was called Legget's Gap. The good people down there having heard that there were two or three ponds of water out this way, on which steamboats ran, determined to introduce their coal, and for that purpose dispatched hither a name-sake of their town, Col. Scranton, who has merits enough of his own, to make almost anything popular. He met, however, with some prejudices, and much resistance from rival interests, but no wise disheartened he persevered in his efforts, sent to the east for blowers, and for men accustomed to the use of his fuel, and finally all things being properly prepared, he made last week an experimental trip on the steamer Empire State. And with complete success steam was kept up to the required gauge, without diminution and without effort. *Thirty* tons less coal were consumed than on any former trip, the dirt and smoke of the bituminous coal were obviated, and the boat made a quicker run than ever before. All hands from Captain to stoker, were delighted with the experiment, which has satisfied the most skeptical of the superior qualities of this coal.

It is, we understand, to be introduced at once into the new boats of the Michigan southern railroad and also into other boats and propellers. And we have no doubt that when known, it will be generally used in private dwellings.

Col. Scranton deserves much credit for the energy and skill he has displayed, and we hope that his enterprise, so promising to our own interests, will be a remunerative one."

Railway Traffic in the United Kingdom.

From a return just issued relative to the passenger and goods traffic on railways in the United Kingdom it appears that the receipts from all sources of traffic for the half year ending 31st December, 1851, amounted on 6,890 miles of railway to £8,247,937, and for the corresponding period of 1850, on 6,621 miles to £7,147,378, showing an increase of 269 miles, and of £1,100,559 in the receipts. The gross receipts on railways in England and Wales for the same period amounted on 5,304 miles to £7,171,551, and for the corresponding period of 1850 on 5,131 miles, to £6,154,943, showing an increase of 173 miles, and £1,016,608 in the receipts. The gross receipts of railways in Scotland for the half year, ending 31st of December, 1851, on 962 miles of railway, amounted to £772,677, and for the corresponding period of 1850 on 953 miles to £718,023, showing an increase of nine miles, and £54,664 in the receipts. The gross receipts on railways in Ireland on 624 miles for the same period amounted to £303,709, and for the corresponding period of 1850, on 537 miles, to £274,421, showing an increase of 87 miles and £29,288 in the receipts.

Comparative summary of traffic upon railways in the United Kingdom during the half year ending 31st December, 1851, and during the corresponding period in the previous year.

Number of passengers.

	1851.	1850.	Increase.
1st class	5,474,086	4,635,531	839,555
2nd class	16,710,716	15,218,930	1,491,786
3rd class	9,386,398	9,079,858	306,540
Parliamentary	15,921,212	12,153,600	3,767,612
Total	47,509,392	41,087,920	6,421,472

The length of railway open at the commencement of the half year ending December 31, 1850, was 6,308, at the end of it, 6,621, increase, 390; at the commencement of the half year ending Dec. 31, 1851, 6,698 miles were open, and at the end of it, 6,890 miles, increase, 269.

Receipts during half year ending 31st December.

	1851.	1850.	Increase.
	£	£	£
1st class	1,378,265	1,151,764	226,501
2nd class	1,722,626	1,543,361	179,266
3rd class	707,278	399,248	8,030
Parliamentary	1,026,651	723,030	303,621
Periodical tickets	42,499	.....	42,499
Total	4,580,827	3,817,403	763,424
Goods, cattle, par. mails, etc	3,667,110	3,329,974	337,136
Total receipts	8,247,937	7,142,377	1,100,500

Receipts during half year ending 31st Dec., on lines in England and Wales.

	£	£	£	Pass.
	1851.	1850.	Increase.	1851.
1st class	1,240,690	1,029,374	220,316	4,751,899
2nd class	1,554,473	1,370,163	184,310	14,727,574
3rd class	356,710	284,832	71,878	8,226,340
Parliamentary	827,482	601,241	226,241	11,876,913
Periodical tickets	36,148	.....	36,148	4,887
Excess fares	3,489	.....	3,489	.....
	4,027,992	3,285,611	742,381	39,587,613
Goods, cattle, par. mails, etc.	3,143,559	2,869,332	275,227	.....
	7,171,551	6,154,943	1,016,608	

The length of line open at the commencement of the half year ending Dec. 31, 1850, was 4,901 miles, and at the end of it 5,131 miles; at the commencement of the half year ending 1851, 5,200 miles, and at the end of it 5,304 miles.

Receipts on Lines in Scotland.

	1851.	1850.	No. pass.
	£	£	1851.
1st class	85,615	79,632	418,637
2nd class	92,687	96,588	930,846
3rd class	37,604	57,247	851,531
Parliamentary	134,943	113,256	2,745,799
Periodical tickets	2,290	.....	6,364
Total for pass	353,140	346,723	4,952,177
Goods, etc	419,537	371,290	.....
Total	772,677	718,013	.....

The length of railway open at the commencement of the half year ending Dec. 31, 1850, was 892 miles, at the end of it 953, increases 61 miles; at the commencement of the half year ending Dec. 31, 1851, 961 miles were open, and at the end of it, 962 miles.

Receipts on the Irish lines.

	1851.	1850.	Pass.	Pass.
	£	£	1851.	1850.
1st class	42,359	42,758	303,550	353,577
2nd class	75,466	76,610	1,052,296	1,465,013
3rd class	12,964	57,169	308,526	1,115,705
Parliamentary	64,226	8,533	1,298,500	155,220
Period. tickets	4,061	.....	5,728	.....
Excess fares	18	.....	.....	.....
Total pass	199,695	185,070	2,968,601	3,089,516
Goods, etc	104,014	89,351	.....	.....
Total	303,709	274,421		

The number of lines open at the commencement of the half year ending Dec. 31, 1850, was 515, and at the end of it 537 miles; the number open at the commencement of the half year ending Dec. 31, was 557 miles, and at the end of it 624 miles—increase 87 miles.

The aggregate length of lines open in England and Wales for traffic on the 30th June, 1851, was 5,038¼ miles, and on Dec. 1851, 5,115½ miles of companies who made complete returns to the Board of Trade, and from which it appears that the mileage travelled by first class passengers was 138,435,079 miles, by second class 268,357,556 miles, by third class 95,926,232 miles, by parliamentary class 214,955,004 miles; the total mileage travelled by passengers during the half year was 717,673,873 miles. The miles travelled by passenger trains was 14,952,759 miles, goods trains 9,114,272 miles. The number of passenger trains was 436,779, and of goods trains 189,729. The following companies have not furnished complete returns:—Ambergate; Bodmin and Wadebridge; East and West India Dock and Birmingham Junction; London and Blackwall; London and Greenwich; Newmarket; South Wales; and South Yorkshire. The aggregate length of theese lines was on June 30, 1851, 161¼ miles, and on Dec. 31, 1851, 188¼ miles. The number of miles travelled on them by passenger trains was 586,823, and by goods trains 42,932; the number of passenger trains was 69,677, and of goods trains 2,072.

The total mileage travelld by passengers on 20 Scotch lines, 671¼ miles in length, was 47,341,100 miles, of which 9,181,747 miles was travelled by first class passengers, 9,443,086 miles by second class, 5,901,800 miles by third class, and 24,814,484 miles by parliamentary class. The mileage travelled by passenger trains was 1,438,228 miles, by goods trains 1,254,378. The number of passenger trains was 64,415, and of goods trains 44,040. The following companies, it appears, have not furnished complete returns:—Caledonian and Dumbartonshire, Edinburgh and Glasgow, Glasgow and South Western; Glasgow, Barrhead, and Neilston, and Stirling and Dunfermline, together 289¼ miles in length, and upon which the passenger trains travelled 450,326 miles, and goods trains 144,231 miles. The number of passenger trains was 14,598, and of goods trains 4,970.

On the fifteen Irish lines during the half year the passengers travelled 39,096,735 miles, of which 6,010,504 miles were travelled by first class passengers; 11,242,416 by second class; 6,784,762 by third class, and 15,059,058 by Parliamentary. The mileage travelled by passenger trains was 950,035

miles, and by the goods trains 234,182 miles. The number of passenger trains was 37,126, and of goods trains 6,097. Complete returns it appears have not been furnished by the Dublin and Kingstown. The mileage travelled by passenger trains on which was 88,020 miles. The number of trains was 14,-670. This company carry their goods by passenger trains.—*Herapath's Journal.*

Lake Superior Copper Region.

The correspondent of the Tribune, furnishes the following account of the leading Lake Superior copper mines, to a very late date.

The Minesota has so far proved the most successful mine on the Ontonagon. This company employs a force of about two hundred men—have invested about $60,000 in surface improvements - shipped 500 tons of copper, and are now raising about 50 tons per month, mostly mass and barrel work. Some of the largest masses yet found in this country have been taken from this mine. I saw a mass at the company's wharf at Ontonagon, which I should judge to be three feet thick. The stock of the Minnesota company is divided into 3,-000 shares, and they expect to make their first dividend the present year.

The Norwich Company, under the superintendence of Clayton Davis, are working about 40 men now; but have employed only 15 during the past winter. They have a very rich vein, on which they have sunk three shafts, the main one to the depth of 143 feet, intersected by an adit level (163 feet long,) at a depth of 63 feet, and by another level 60 feet below the adit. This company have shipped five tons of copper this season, and have some 80 tons of masses and barrel work out and in sight at the mines, besides a large amount of rich stamp work. Near the bottom of the main shaft, Capt. Davis has found an immense mass of pure copper. It has not been entirely uncovered yet, so that nothing like an accurate estimate of its weight can be made now; but Capt D. and others who have seen it, estimate that there are 25 to 30 tons of it in sight. The Norwich company have several buildings up, and will erect eight or ten more during the present summer; have 16 acres of land under improvement, and a natural meadow of wild grass which supplies hay for the horses used at the mines. The company commenced operations in the summer of 1850. Their stock is divided into 20,000 shares, and is owned largely in New York.

The Windsor is a new mine, on which very little work has been done as yet. It adjoins the Norwich on the east, and is supposed to be a continuation of the same vein.

The Forest Company have worked, 30 to 35 men, during the winter, and have shipped thirty-five tons of copper this season. The mine is working well.

The Adventure has shipped about thirty tons this season.

The Farm and *Taltec* have well defined veins, and are turning out a good deal of copper for new mines. They have made no shipment yet, and probably will make none this season.

The Ridge, Astec, Ohio and Piscataquis are all working in the same range of bluffs, and are working through a bed of rock which yields more or less copper, but they have found nothing like well-defined veins as yet.

The Ohio Trap Rock Company abandoned their old works and commenced new diggings in Sept. last, with results not very flattering, so far.

The Douglass Houghton Co. have done considerable work on their location and the vein is said to look so so.

The Peninsula, Ontonagon, Algonquin, Firesteel and Eagle are new mines and have not as yet been able to show anything calculated to astonish the natives.

There are many explorations going forward in the Ontonagon district, and large quantities of land, supposed to be rich in mineral, have been entered here this season.

Several attempts at copper mining have been made on Isle Royal, all of which have been abandoned except the Siskowit Co. They still hold out, but with what prospect of ultimate success I have not been able to learn. I understand that about 100 persons—men, women and children—wintered on this bleak island. They must have had a jolly time of it, as they were entirely shut off from communication with the rest of the world for six long, dreary months.

The Bruce Mines are on the Canada side, near the head of Lake Huron. This company commenced work in 1845 and have a tract of ten square miles. They have sunk eight shafts and run three levels, the deepest shaft being about 190 feet. They have a beautiful engine, 45 horse power, (English,) which drives their crushers and stamps. They have also a smelting works and refinery, but are not smelting at present, the dressed ore being shipped instead. Their lode is from 3 to 6 feet in width, bearing yellow sulphuret of copper, with a sprinkling of grey. They have shipped up to the present time about 500 tons of refined copper. Two hundred miners would take out now from 300 to 350 tons of ore per month, which, when dressed, would yield 15 to 18 per cent. of copper. The greatest population at the mine (in 1849) numbered 623 men, women and children. The present population is 326—134 of whom only are on the company's pay list. The capital of this company is £300,000, a large proportion of which has been paid in.

The Fisheries.

The following statistics of one branch of our fisheries, shows the importance of the interest which Massachusetts has at stake. These estimates are from Mr. Mayo, Inspector General of Massachusetts:

54,040 tons, being 858 vessels, navigated by 9,174 men and boys.

Value of vessels and outfits	$3,532,000
Annual value of catch	2,400,000
The value for the rest of New England may be considered as nearly equal to this amount, say value of vessels and outfits	2,500,000
Value of catch	1,600,000

30,000 tons—6,000 men and boys.

But only an approximation can be made, as many vessels are employed in both cod and mackerel.—The Massachusetts mackerelmen in 1851 caught fares as follows:

In American waters, bbls	188,336
In waters, the exclusive right to which is now claimed by Earl Derby, bbls	140,906

All of them following the movements of the fish and fishing part of the time in each waters.

Illinois.

The Northern Cross and Central Military Tract Railroads.—We are gratified to learn that these two roads have been consolidated, and will be controled by one directory. The Northern Cross, as our readers will remember, from the notices we have heretofore made of it, has its Western terminus at Quincy, on the Mississippi, and its Eastern, opposite Naples, on the Illinois river. It is one of the works upon which the State expended a considerable amount of money, during the palmy days of speculation, fourteen years ago. The Central Military Tract road was to commence at or near Columbus, on the Northern Cross, and run Northeast, through the counties of Adams, Hancock, McDonough, Warren, Knox, and Stark, and connect in Bureau with the Chicago and Rock Island road. The two lines are located in the most lovely agricultural region in the world. It is a succession of beautiful groves and prairies, with a soil of unsurpassed fertility. The people in the counties interested have subscribed liberally, and in some cases, heavy subscriptions have been voted by the counties in their corporate capacity. Nevertheless, the progress of both works has been slow, owing, in a measure, to the want of concentration of the means of both lines on one, and the conflict of interests. To secure a union of the two roads, an act was passed, by the last Legislature, giving them permission to form connections with any roads running into Chicago. Under this they have united. The change will cause the Northern Cross to run directly from Quincy to Galesburg, in Knox county, where it will connect with the Military Tract. The latter will doubtless be able to make arrangements to come into Chicago on one of the several roads now in process of construction in the direction of Rock Island. We have reason to believe that within the next two years, the entire line between Quincy and Chicago will be open for trade and travel.—*Chicago Tribune.*

Progress of Steamboating in the West.

The first steamboat ever built in Pittsburgh was called "New Orleans." She was built under the superintendence of Mr. Rosevelt, for Messrs Fulton and Livingston, of New York; was of 138 feet keel, and calculated for about 400 tons burthen. She was launched in March, 1811, and arrived at Natchez in December of the same year, where she took in passengers and freight, and from thence she proceeded to New Orleans,

This was forty-one years ago. During the last year, 1851, no less than three hundred and twenty steamboats were constructed; at Pittsburgh 112; Wheeling, 46; Cincinnati, 111; Louisville, 61. The aggregate tonnage amounted to 63,297 tons. The total number of passengers carried on these steamers during the year was 3,050,626. The marine insurance effected on the hulls and cargos amounted to $32,811,440. For the six months of the present year, there are fifty-nine steamboats built or in progress of construction. Number of steamboats destroyed in the course of the year 1851, belonging to the four districts above named, was 44; of this number, 19 were snagged, and 13 burned. The number of lives lost, by these disasters, was 482.

Canada.

Richmond Railway.—The Quebec Mercury says, respecting this railroad:—

"We have heard that the most satisfactory arrangements have been concluded between Mr. Ross, the representatives of the English capitalists, and the directors of the company, by which the whole amount required for the completion of the road will be forthcoming. Mr. Ross will leave in a few days for Montreal, to examine and report upon the line from that city to Hamilton.

French Railway System.

I extract the following information touching the railways of France, from a long article in the *Moniteur* of this morning, setting forth the claims of the Government to public admiration for the zeal and intelligence with which its energies have been directed to this all-important subject. Hitherto the reproach of backwardness has lain with much justice at the door of the French Government.

The Prince Louis Napoleon seems determined to remove the stigma from the escutcheon of modern France by the prompt completion of the beautiful system of railway radii intended to unite the center (Paris) with at least seven principal points of the circumference of the Empire or of its extreme frontiers. The total length of seven lines, connecting Paris with the Atlantic and Mediterranean, and with the Belgian, Swiss, German, Italian and Spanish frontiers, is 6,983 kilometres. The French kilometre (1,000 metres) is equal to 1,093¼ English yards. The above total length of 6,983 kilometres is 4,337¼ of our miles.

Of this sum about four sevenths, or 3,979 kilometres, will, by the end of this month, (July, 1852,) be completed and in operation. For these lines the expense borne by the State will, on the 1st of January next, amount, in its grand aggregate, to 215,-000,000f., (say $43,000,000). But, as the State will at that date have received, from the various companies the sum of 144,000,000f, the actual outlay of the State will be reduced to the sum of $71,000,-000, or an annual average of 10,000,000f. It is believed that, unless some unforeseen events should intervene to prevent, the whole system will be completed and in operation by the end of the year 1859.

The line connecting Paris with the German frontier at Strasburg is just completed and will be opened to the public next week. The ceremony of inauguration is to take place the 17th inst. and the three following days. The Prince President himself intends to show the interest he takes in the subject by being present. He will leave Paris on the 17th, spend the night at Nancy and proceed next morning to Strasburg on the Rhine, returning to Paris on the 20th. No political demonstration, such as those which made similar occasions so

anxiously watched prior to the 21 December last, are now anticipated.—*Paris correspondence of the National Intelligencer.*

American Railroad Journal.

Saturday, August 14, 1852.

Mobile and Ohio Railroad.

In our paper of the 19th of June, we gave an interesting communication upon the subject of this road, prepared by John Childe, Esq, Chief Engineer and general agent of the company. We now give a circular letter of the company, issued with a view to prepare the public mind for the proposed issue of bonds, by which a portion of the means, required for the work, are to be raised.

The route of this road extends in nearly a direct line from Mobile to the mouth of the Ohio, a distance, in round numbers, of 500 miles. For the first 350 miles, it follows the dividing ridge between the waters flowing in different directions, chiefly into the Mississippi, and Bigby rivers. It traverses therefore, a country deprived of natural outlets to a market. By avoiding the large streams, a remarkably favorable route is secured. For the whole distance no bridge is required of over 130 feet span. There will be no heavy work upon the whole line, and there can be no doubt, from the known accuracy and caution of Mr. Childe, that the entire work will be executed within the estimates.

While from the want of natural avenues, the road must supply the outlet for the produce of the country traversed, this is well known to be not only one of the most fertile and productive portions of the South, but of the whole country. That portion of it lying in the State of Mississippi, produces a larger amount of cotton to the number of inhabitants, probably, than any equal area in the United States. This has now to be waggoned a great distance, and at great expense, over miserable roads, to a market. Like all portions of the country similarly situated, its resources have but just begun to be developed, and its productions are capable of being increased to an almost indefinite extent. The portion of Tennessee through which this road will run, produces a very large amount of cotton, and is a very fertile and well settled country. When we come into Kentucky the soil is equally fertile, and well settled, but the productions are of a character that belong to a more northern climate. The whole line of the road, with the exception of a short portion of its Southern extremity, may be said to pass through an extremely fertile and well settled country, having for export, a very large surplus, which must be forwarded by the above road to a market.

We would here remark what we have often stated, that in the cotton growing regions of the South, in particular, a much larger amount of traffic is thrown upon railroads, compared with the productive capacity of the whole community, than in the more Northern States where labor is more divided, and employed in the production of articles of immediate consumption among the producers. Large portions of the South are devoted almost exclusively to the production of *cotton*. None of this cotton is manufactured there. It is all to be exported, even such as is eventually worn by the cotton growers, themselves. The whole production of an entire section of country is thus thrown upon a railroad. But as nearly everything *raised* is *exported*, so nearly everything *consumed* is *imported*. The amount to be carried by railroad traversing such section represents nearly twice the bulk of the whole surplus product. In the North, on the other hand, the great diversity of labor in each town and village, supplies most of the wants of the people in them.—The various products that go into consumption pass directly from the producer to the consumer, without the interposition of a common carrier, like a railroad. The different state of things at the South, not only show a greater necessity for railroads, but as far as their business is concerned, gives them some decided advantages over those of the Northern States.

It is hardly possible to conceive of a better route for a railroad than that occupied by the Mobile and Ohio road. One great want in the south are good harbors, having a sufficient draught of water for the largest cotton ships. This the above road will have when extended to the lower bay below Mobile as proposed. This will secure to the shipping every convenience and advantage desired. Its north terminus may be said to be the agricultural centre of the U. S. From the mouth of the Ohio to New Orleans, by the Mississippi river, is over 1090 miles, and nearly 1200 to the Gulf of Mexico, against 500 by the Mobile and Ohio road. This river is now the only channel for the vast travel and business concentrating at this terminus. All this travel, and much of the freight, will leave the river as soon as the railroad shall be constructed. The prospects of the *through* business of the above road are as flattering as is its local traffic.

The extent of the local traffic of the road it is hardly possible to estimate, for the reason that it is impossible to conceive the amount of increased production due to the influence of the road, or the extent of this influence in diverting to it the business accustomed to take other and more circuitous routes to market. It must monopolize the carrying trade of the immediate region traversed. Commencing at its northern terminus upon the Mississippi, and running to the gulf in a direction diagonally to that river, it must exert a strong tendency to divert from the river a very large amount of freight that now seeks that outlet. The position of this road for drawing trade from the accustomed channels that have been followed from necessity, and not from convenience, is most favorable, and cannot fail to exert a very strong influence over the success of the project. We do not, therefore, think that the company are in any danger of ever estimating the revenues of the road.

While the company have one of the best projects in the United States, it has been managed from the outset with the greatest ability and sound sense. They have uniformly acted upon the determination not to injure it by wasting a cent in construction, neither by excessive salaries, extravagant prices paid to contractors, nor in exorbitant shares of their securities. The company have proceeded upon the principle of making all contracts equal to *cash*, and of moving only so fast as necessary means were provided. The construction of the first division devolved upon the city of Mobile, and the work thus far has been carried on by means furnished by that city without creating any incumbence upon the road. As soon as the section of country was reached which was able to contribute liberally to the work, the company adopted the rule to proceed only so fast, as one half of the cost of the road should be raised by those living in the immediate vicinity of the route. This rule throws the burden of construction where it belongs, and has nearly secured the necessary amoun tfor the preparation of the whole road for the iron, and has created a basis upon which a future loan can be effected, for the purchase of this article, and the equipment, upon the most favorable terms. The company will not come into market with its road securities for a dollar until one-half of the cost of the road shall have been provided by the domestic means of the country. They then expect to, as they will, find their securities sought for, for investment, at the highest figure that those of similar first class projects command.

The present favorable condition, and the wise policy that has characterised the conduct of the company, is due in no small degree to their Chief Engineer and General Agent, John Childe, Esq., whose long and extensive experience in the line of his peculiar duties, eminently fit him for the arduous and responsible position he holds, and whose relation to the company is a sufficient guarantee to capitalists, that what is done, will be well done; that the means of the company will be faithfully applied and economically expended, and that this stupendous project will be carried forward with a firm and steady hand to its successful accomplishment. Mr. Childe understands the art of true economy, which consists in wasting nothing, nor in withholding liberal expenditures whenever the exigency demands. It is a matter of general congratulation that a work of such national importance is in such competent hands.

Canada.

Quebec and Halifax Railroad.—We find in the Canada papers, the reply of Sir John Pakington, Colonial Secretary, refusing to accede to the recent application of Mr. Hincks, for the Imperial guarantee to the above project. The reasons given by Sir John are, that a road by the valley of the St. John's river would not be likely to advance the interests of the mother country, however much it might those of the colonies. The route of the St. John is besides too near the American frontier; and a road that might be available rather in a military than a commercial point of view was the one most desirable by the British government.

We have always been of opinion that neither the construction of the Major Robinson, nor the St. John route, was justifiable on *commercial considerations;* so we do not quarrel with the decision of the Colonial Secretary. The Provinces think differently with regard to the St. John route. But in candor we must say, that we believe the reasons assigned by the British government, will be received with feelings of contempt by every provincial, and will in the end breed a mischief, the extent of which is little dreamed of, by the home government. The Provinces, seeing the care of the mother country to be influenced only by *military* considerations, will be very likely to take the management of their affairs into their own hands, and no longer be guided by the opinions and interest of a really hostile power.

Railroad Examination.

The committee appointed by the Legislature to inquire into the causes of railroad accidents, consisting of Senator Bartlett and Mr. McAlpine, State Engineer, with Senators Smith and Monroe, having passed over the Harlem, New Haven and Hudson River railroads, a few days ago, left in a special train, on a tour of examination over the Erie railroad. They were accompanied by Hon. J. C. Wright, comptroller; Col. Schlatter, superintendent of the Ogdensburg railroad; Mr. Doxater, Superintendent of the Watertown railroad; Mr.

Whistler, Superintendent of the New Haven railroad, Major Morrell, Civil Engineer; Messrs. Wright and Baker, and several of the officers of the road. Mr. Minot, Superintendent, Mr. Post, Chief Engineer, Mr. Marsh, Secretary, and Mr. Warren, Auditor, were also of the party.

American Association for the Advancement of Science.

The standing committee of this body, in view of the prevalence of cholera in the west, announce the postponement of the annual meeting, which was to have been held at Cleveland, Ohio, on the 18th inst.

Stock and Money Market.

The stock and money market presents the same general uniformity that it has maintained for some months past. Money has continued very abundant for the whole summer, giving every facility to speculation, which has been extremely active, during an usually dull period. From the amount of money seeking investment, the first class securities continue to rule high, which is the case generally with "fancies," for the same reason. We see no reason to doubt continued ease in the market, until some unforeseen influences shall develop themselves.

In bonds of new works, there is not an active business doing, more perhaps for the want of attractive securities, than from lack of money. A good many transactions are made, however, that do not come before the public. The Mobile and Ohio railroad company have recently made a large sale, at par, of City of Mobile 8 per cent bonds, based upon the late tax voted by the city to the above road, having about four years to run. We learn also that the Alabama and Tennessee railroad company are about to offer in this market $500,000 of their road bonds. These last bonds are based upon very ample security, the company having two dollars paid up for every one they wish to borrow. The road has a very strong route, and the security is one that is certain to become a popular one, from its intrinsic merits. The southern roads now coming into market, make a better show of strength in the shape of good stock subscriptions than the average of new projects. The southern people are now managing their projects with great judgment, and construct their roads with more economy, we think, and proceed with greater caution, than northern companies.

We learn that the Scioto and Hocking Valley railroad have negotiated $100,000 city of Portsmouth, Ohio, bonds; terms not made public.

The earnings of the Erie railroad for July were $301,000, and the receipts for 7 months ending July 31, $1,928,292. The company's estimate for the year was $4,000,000; to equal which, the road must earn over $400,000 per month, for the balance of the year.

The market has been unusually active for the time of year, improving both in fancy stocks and those bought for investment; and money is obtained on good security at very low rates.

To present in a more connected view the weekly state of the market, our future numbers will contain a brief notice of the transactions of each day.

Thursday 5, *August.*—The temporary depression of the previous week, gave place to day to an entirely different feeling, under which nearly all the securities in the street showed a marked advance, particularly Reading and Erie stocks, with large sales.

Friday, 6th August.—There were large transactions to day, the stocks of the Erie, Harlem, Hudson and Reading Cos., wers sound stocks, were in active demand for investment. Rochester and Syracuse were sold at 119. Madison 107. N. Y. and New Haven 114. Michigan Central 113¼. Northern Indiana 120 asked, 117 5-8 offered.

Saturday, 7th August.—The stock market was extremely active and the sales very large. No less than $150,000 of the convertible bonds of the Erie railroad were sold; those of '71 at 97 and '62 at 98. Southern Michigan at 119. Reading 92¼. Harlem 71½. Norwich 55. The receipts of this road for July were $25,187.

Monday, 9th August.—The buoyant feeling noted still continues. Government and State stocks advanced, U. S. 6's and 5's, ¼ per cent. Erie, 1¼ per cent. on the stock and the bonds ½ per ct. Other railroad stocks shared in the advance.

Tuesday, 10th August.—The prices of yesterday were mostly maintained, 3,800 shares of Reading were sold, opening at 92⅞ and closing at 92½. About the same amount of Erie varying from 89⅜ to 89½. convertible bonds of '71 sold at 97¼ and those of '62 at 96½.

Wednesday, 11th August.—A slight reaction occurred in some of the fancy railroad stocks. The premium railroad dividend stocks maintain their advance. The steamer of to-day took out $725,000 in specie, without any marked effect upon the market. We hear of no large operations during the week in new securities with the exception of those already noticed.

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, AUGUST 14, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	101⅛
U. S. 6's, 1856	108
U. S. 6's, 1862	115
U. S. 6's, 1862—coupon	115½
U. S. 6's, 1867	118⅛
U. S. 6's, 1868	118⅜
U. S. 6's, 1868—coupon	119
Indiana 5's	95
Indiana 2½	53⅛
" Canal loan 6's	95½
" Canal preferred 5's	46¼
Alabama 5's	95
Illinois 6's, 1847	82½
Illinois 6's—interest	52½
Kentucky 6's, 1871	109
Massachusetts sterling 5's	—
Massachusetts 5's, 1859	—
Maine 6's, 1855	—
Maryland 6's	108½
New York 6's, 1854-5	108½
New York 6's, 1860-'61-'62	117
New York 6's, 1864-'65	120
New York 6's, ½ y., 1866	121
New York 5½'s, 1860-'61	110
New York 5½'s, 1865	111
New York 5's, 1854-'55	105½
New York 5's, 1858-'60-'62	106½
New York 5's, 1866	111
New York 4½'s, 1858-'59-'64	101½
Canal certificates, 6's, 1861	—
Ohio 6's, 1856	106
Ohio 6's, 1860	109
Ohio 6's, 1870	111½
Ohio 6's, 1875	116
Ohio 5's, 1865	105½
Ohio 7's, 1851	105½
Pennsylvania 5's	97⅛
Pennsylvania 6's, 1847,-'53	99½
Pennsylvania 6's, 1879	100
Tennessee 5's	—
Tennessee 6's, 1880	107
Virginia 6's, 1886	111

CITY SECURITIES—BONDS.

Brooklyn 6's	105
Albany 6's, 1871-1881	106½
Cincinnati 6's	100
St. Louis	96½
Louisville 6's 1880	95
Pittsburg 6's, 1869-1871	101
New York 7's, 1857	108
New York 5's, 1858-'60	102½
New York 5's, 1870-'75	105
New York 5's, 1890	106½
Fire loan 5's, 1886	—
Philadelphia 6's, 1876-'90	104½
Baltimore 1870-'90	107½
Boston 5's	102

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1867	113½
Erie 2d mortgage, 7's, 1859	108½
Erie income 7's, 1855	97½
Erie convertible bonds, 7's, 1871	97½
Hudson River 1st mort., 7's, 1869	107½
Hudson River 2d mort., 7's, 1860	97
New York and New Haven 7's, 1861	106
Reading 6's, 1870	89½
Reading mortgage, 6's, 1860	95½
Michigan Central, convertible, 8's, 1860	112
Michigan Southern, 7's, 1860	99½
Cleveland, Col. and Cin. 7's, 1859	114
Cleveland and Pittsburg 7's, 1860	102
Ohio and Pennsylvania 7's, 1865	102½
Ohio Central 7's, 1861	96

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Aug. 5.	Aug. 12.
Albany and Schenectady	107	106
Boston and Maine	106½	106½
Boston and Lowell	—	109½
Boston and Worcester	104	104½
Boston and Providence	89	89
Baltimore and Ohio	82½	82½
Baltimore and Susquehanna	29½	29½
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	146	—
Delaware and Hudson (canal)	126½	126½
Eastern	96	97½
Erie	87½	89½
Fall River	—	—
Fitchburgh	103	103½
Georgia	—	—
Georgia Central	—	—
Harlem	72	72
" preferred	110	110½
Hartford and New Haven	—	127
Housatonic (preferred)	35	35
Hudson River	67½	68½
Little Miami	—	—
Long Island	19½	20½
Mad River	—	99
Madison and Indianapolis	112½	—
Michigan Central	113½	113½
Michigan Southern	116½	118½
New York and New Haven	113½	111
New Jersey	130	130
Nashua and Lowell	—	—
New Bedford and Taunton	—	117
Norwich and Worcester	54½	53½
Ogdensburgh	26	26½
Pennsylvania	46½	46½
Philadelphia, Wilm'gton & Balt.	32½	33
Petersburg	—	—
Richmond and Fredericksburg	100	100
Richmond and Petersburg	35	35
Reading	91½	92½
Rochester and Syracuse	—	119
Stonington	57½	55½
South Carolina	—	—
Syracuse and Utica	134	136
Taunton Branch	115	115
Utica and Schenectady	134	135
Vermont Central	14½	15½
Vermont and Massachusetts	20	22
Virginia Central	—	—
Western	104½	104½
Wilmington and Raleigh	57½	57½

Railroad Lanterns.

Our readers will find an advertisement of every variety of railroad Lanterns in another page.

New Jersey.

Camden and Atlantic Railroad.—The following is an abstract of the report of the Engineer, Richard B. Osborne, Esq., dated 24th June, 1852, containing the results of the preliminary survey and general examination of the route of the road, extending from the city of Camden to Absecum, N. J. The survey has been made more with the view of obtaining data, for estimating the cost and character of the line, than of absolutely determining its location. Starting East of Camden, in the vicinity of the first tollgate on the Haddonfield turnpike, the survey runs south of the turnpike, and nearly parallel with it to Haddonfield, and then by the valley of Cooper's creek to the summit of Long-a-coming which divides the streams flowing into the Delaware from those that run into the Atlantic. This portion is more undulated and varied than the rest of the route. The undulations occur on the streams tributary to Cooper's creek. The line then passes through the village of Long-a-coming, and running north of the Waterford road, occupies a favorite tract of land between it and Jackson, then curving toward the town of Waterford at the distance of half a mile, approaches within ¼ of a mile to the town and works of Winslow, then it shapes S. E. along the dividing ridge of the streams flowing into Little and Great Egg Harbors, respectively, which extends to the seaboard and is very eligible for the construction of a railroad. The survey then crosses the meadows which separate the beach from the mainland. Two lines have been surveyed across the meadows, the southern one is preferred as avoiding more of the "Thoroughfares," or streams, and presenting a better surface. The soundings on the northern line give a depth to the gravel on these meadows of from 8 to 20 feet, on the southern they do not exceed 6 to 12. The meadows are sometimes covered, when a spring tide and easterly gale combine, to a depth of three feet, this is however seldom, usually, but once a year. The Southern line crosses Beach Thoroughfare and turning north with this stream gains the point of the Beach at the mouth of Absecum Bay. The branch to the village of Absecum crosses the low lands at an elevation of 20 feet above low water mark, and terminates at the southwest end of the village. Its length is two and a half miles.

The length of the entire road will be about 57 miles, of which, upwards of 40 miles will be straight, and 23 of these will be in a continuous line. The gradients will not on any portion exceed 25 feet per mile, of which there will not be more than 5 miles in detached portions. On 12 miles they will not exceed 20 feet; on 20 miles they will not exceed 8 feet; and on 22 miles they will be either horizontal or not over 5 feet per mile. The total rise above mean low water to the Long-a-coming summit, is 181 feet. Between this summit and Camden the land is more undulated in its character than the other portions of the route.

The principal object in the construction of this road besides furnishing a rapid conveyance to a large number of passengers, is, to secure the business of carrying the products of the seaboard to the Philadelphia market, and the freight of the numerous and large factories upon the route.

The number of passengers at present passing by stage over the whole of this route is stated as at least, 32,000 yearly. It is believed, that if this road was constructed, the attractions of Absecum Beach, would bring over this road a very large portion of the pleasure travel from Philadelphia, and mainly in consequence of the speedy transit, viz: one hour and a half. At present, Haddonfield being six miles from Philadelphia, and other villages upon the route are places of much resort.—The trade of the towns upon the route with Philadelphia is large. The factories upon the line expend each year in transportation $30,000, not including the Weymouth Iron establishment which is obliged to provide its own vessels to Philadelphia. On the timber land, staves, lumber, and charcoal are produced, and carried to market in considerable quaatities. If railroad communication existed, the quantities of these transported would be greatly increased, as also of marl and lime.

The trade of the coast now passes to Philadelphia in small vessels. The whole of this coast produces immense quantities of the finest fish, black fish, sheepshead and sea bass. Codfish are taken in large quantities at certain seasons. The shore is well planted with the finest oysters. Through the want of a rapid transit to market, these valuable products of the sea, which Philadelphia so greatly needs, have been hitherto almost wholly lost to her. With all the difficulties attending the hauling of these commodities over 60 miles of heavy road, about 80 loads are now transported, weekly, to Philadelphia. If proper facilities were given to this trade it would doubtless be quadrupled. Several thousand tons of marl and lime are now hauled to the lands lying west of Haddonfield, and large quantities of charcoal are sent to Philadelphia.—The manufacturing establishments on the line of the road expend about $30,000 in the transportation of their products over land, without including the Weymouth iron establishment, which provides its own vessels to Philadelphia.

The following is a summary of the estimated annual receipts on the road and their sources.

32,000 passengers at $1	$32,000
20,000 visitors to the Beach $1 50	30,000
4,000 loads of Oysters at $4 per load	16,000
40,000 cwt of fresh fish at 25 cts per cwt	10,000
225,000 bushels of charcoal at 1 cent per bushel	2,250
2,000 tons of lumber at $1 per ton	2,000
10,000 tons of marl at 50 cts	5,000
2,000 tons of lime at $1	2,000
1,300 tons of groceries at $5	6,500
Glass works freight, coal etc	12,000
Haddonfield passengers and freight	5,000
Mails	2,000
	$124,750
Management and working expenses 45 per cent	56,138
Profits	$68,612

Being about 10 per cent on the estimated outlay.

The engineer in estimating the cost of the road, proposes the adoption of a continuous rail, an increase in the number of sills, and a rejection of the old fashioned spike. He considers a well manufactured rail of 50 lbs., laid on sleepers 2 feet apart, preferable to one of the common description of 100 lbs. per yard laid on sills 3 feet apart.

The following is the estimated cost of the road with a single track, and outfit for the first year's business.

60 miles of graduation and bridging at $3,300 per mile	$198,000
60 " superstructure laid at $3,000 per mile	360,000
Stations	20,000
Outfit	80,000
Sidings, switches, etc	10,000
Engineering	25,000
	$693,000

This includes land damages to the amount of $10,000.

Statement of Outfit.

7	Locomotive engines at $7,500		$52,500
6	1st class passenger cars at $2,000		12,000
6	2nd " " " at $1 200		7,200
10	4 wheeled open cars at $130		1,300
10	4 " closed cars at $200		2,000
10	8 " open cars at $240		2,400
5	8 " closed cars at $450		2,250
			$79,650

Railway Accidents.

The subject of accidents on railways has been examined very fully in England by Capt. Huish. The conclusions he arrives at, may, making allowances for the different systems of working in the two countries, be found of value here. With regard to the road, or permanent way, from which fewer accidents occurred than from any other cause, its complete effectiveness, he considers, was the basis of all safety in railway travelling; and for keeping it up, constant vigilance was necessary, especially when any great and sudden change of weather took place, as then the weak points were sure to show themselves.

The increase of travel, and numerous crossings and turnouts to accommodate side lines had increased in the same proportion the risk of accidents, and it might be received as an axiom, that anything which broke the continuity of a rail tended to develop danger. The adoption of judicious regulations combined with effective signals, would tend to reduce the risk of accidents. The use of self-acting switches was attended with evils of no trifling magnitude, and many accidents had occurred from reliance on them; indeed, as a general rule, machinery to supersede personal inspection and manipulation was fraught with danger.

With respect to the rolling stock, out of 1,000 cases of engine failures within two years, on the London and North Western railway, the largest class was that of leaky and burst tubes; and these, with broken springs and valves amounted to one-third of the whole number. The passenger carriages presented almost complete immunity from accident; for the last four years, out of the large stock of the London and North Western railway, only six wheels had failed. The fracture of axles, the defective method of coupling and want of proper buffers, on the merchandise wagons, had led to the destruction of much property.

Various plans of communication between the passengers and the driver are alluded to. The plan of a wire or rope had been tried and failed. That of continuing the foot boards, so as to form a continuous narrow platform from end to end of the train, had been condemned by a committee of railway officials. The plan adopted on the London and North Western railway was for the guard's van at the end of the train to project about a foot beyond the other carriages, so that the guard looking through a window in this projection, might notice the waving of a hand or handkerchief; this was of course useless at night.

The electric telegraph had greatly facilitated working under variable circumstances, and so beneficial had its effects been, that, during the year 1851, out of 7,900,000 passengers, or nearly one-third of the population of England, who had travelled over the London and North Western railway, only *one* individual had met with his death, (from which casualty the author also suffered,) and this was the effect of the gravest disobedience of orders. In the six months during which the exhibition was opened, 775,000 persons were conveyed by excursion trains alone, in 24,000 extra carriages, center-

ing in a single focus, arriving at irregular hours and in almost unlimited numbers, from more than thirty railways, without the most trifling casualty, or even interruption to the ordinary extensive business of that line.

The author thinks undue importance had been attached to the question of irregularity in the times of the trains, as an essential element of safety, for with perfect signals and a well disciplined staff, no amount of irregularity should lead to danger; but, on the contrary, it should, to a certain extent, by its very uncertainty, induce increased vigilance, and therefore greater safety. Accidents very rarely happened from foreseen circumstances, but generally from a simultaneous conjunction of several causes, and each of these was provided for as it arose. The statistics of railways, and the periodical publication of the government returns, drew public attention very pointedly to the aggregate of accidents; but it was believed that if due regard was had to comparative results, if the accidents to steamers, or in mines, to omnibus passengers, or even to pedestrians, were as carefully recorded, that then, whether as regarded the ease and celerity of transit, or the facility of conveying numbers, the railway system, even in its present state, would be found to be incomparably safer than any other system in the previous or present history of locomotion.

It will be perceived that the general conclusion arrived at is, that no mechanical arrangements or scientific appliances can consistently with safety take the place of constant personal vigilance and attention to the numerous and unavoidable exigencies of the railway system of travel. A vigilant eye must always be present to perceive the source of danger, and a skillful hand ready as far as possible to prevent its occurrence, and these are the best reliance to ensure life and property on the railroad.

New York.

Syracuse and Binghamton Railroad.—The report of William B. Gilbert, Esq., the chief engineer of the Syracuse and Binghamton railroad, to the directors on the 9th July 1852, exhibits the following facts and estimates.

The line of the road has been located, the work prepared for contract, and an estimate of the cost of grading, masonry and bridging, for its construction is presented in the report.

The general character of the country from Syracuse to Binghamton, is very favorable for the construction of a good road. From Tully summit, south, (three-fourths of the entire distance) the grading will be less than that of any other road of the same extent in this part of the state. The geological formation of the country will furnish excellent material for the formation of the road bed. The location of the line from Syracuse to Tully Summit, where an elevation of about 800 feet must be overcome within a distance of 19 miles, presents the only engineering difficulty to be met with upon the entire route. Upon this part of the route three different lines have been surveyed and estimated; of which, the Jamesville route has been selected, the difference in its favor being estimated at $210,070, besides a saving in length of over three miles, and for each mile of distance saved in a comparison of routes, on roads yielding a net income of 10 per cent, and over, it is estimated that the company would be authorised to expend $60,000. From the north end of Little York Lake, two lines have been surveyed through Homer village. From the point of intersection the line continues down the valley of the Tiongnioga, crossing and re-crossing the north branch, north of Cortland village, to avoid curvature and distance. After leaving Cortland, the line is located along the western side of the valley of the Tiongnioga. A change is proposed in the route between the valleys of the Tiongnioga and Chenango, shortening the distance 4,600 feet and reducing the cost of grading etc., $12,221. This route will require a bridge 500 feet long to cross the Chenango river and canal at an elevation of 35 feet above the water. The road then passes over an undulated and broken surface, until it intersects the line of the New York and Erie railroad at Binghamton, making a total length of line of 79.64 miles. The estimate is made for a single track, with the requisite side tracks and turn-outs, and on a road bed of 25 feet wide, in excavations, and 14 feet in embankment, with the usual slopes of 1½ feet horizontal to 1 foot rise in earth, and ¼ to one in rock. The total cost of the road ready to receive the superstructure is estimated at $717,863 80, or $9,014 per mile.

The materials used in the construction of the road are abundant and of the best quality on every part of the line. The length of bridging will be comparatively small, there being but one structure of any importance on the line. At the crossing of the Chenango a bridge of 500 feet will be required.

The district through which the line passes, is densely settled containing an adult male population equal to 300 for each mile of travel. Assuming an average of $2 for each male inhabitant, this would yield an annual income of $48,000. The surrounding country is rich in agricultural and dairy products. Its present annual tonnage is equal to 40,000 tons, at an average distance of 30 miles at $1.20, amounting to $48,000.

The most important considerations are its connections with other roads, at Syracuse with the great Central line and at Binghamton with the N. York and Erie, the Albany and Susquehannah, and the Lackawaxen and Western roads, thus ensuring to the northern frontier of the state a permanent and cheap supply of coal.

At Syracuse the supply of fuel for the manufacture of salt is a matter of vast importance to the future prosperity of this business. In this manufacture and for other purposes, Syracuse now consumes annually 300,000 cords of wood. In a report recently prepared by a committee upon this subject it is stated, that "the annual saving in the expense of fuel in Syracuse, by the use of coal, would be more than $100,000.

It is a matter of certainty, that the coal trade will constitute a large part of the freight business of this road. The large supply that will be called for, at Syracuse, Oswego, and for shipment at the latter place, justifies the estimate of 100,000 tons annually, as through freight, which at $1 20 per ton would amount to $120,000.

Oswego will become the northern terminus of this line of road, which will there connect with the entire chain of lakes, and in addition to the Welland canal, with two great lines of railway entering upon lake Ontario to the Canada side, which will beeome tributary to Oswego by steamboat connexion.

Oswego, by its trade and manufactures, is now one of the most important of the cities on the lakes. The following statistics have been compiled from an authentic source.

In 1851, the coastwise trade at Oswego was over $22,500,000, and there was shipped by canal at that place, during the season the following articles:—

Flour, barrels	888,131
Wheat, bushels	1,676,213
Corn do	1,192,217

Of the articles imported by canal during the same season, were the following:

Domestic salt, barrels	439,400
Railroad iron, tons	50,000
Mineral coal do	8,500
Merchandise do	47,000

Of the articles imported by lakes during the same season were the following:

Flour, barrels	389,929
Wheat, bushels	4,231,899
Corn do	1,251,500

The water power of the Oswego river is one of the finest in the world. In the season of 1851, the Oswego mills manufactured 67,000 barrels of flour; in the same season the imports of wheat and the quantity were greater than at any other place in the state or the U. S. The mills already in operation are capable of manufacturing 1,500,000 *barrels of flour* during the season of navigation.

Oswego may therefore be expected to furnish a large proportion of all the flour consumed in central and southern New York and Northern Pennsylvania near the line of railroads. The tonnage of flour, salt, and plaster is estimated at 50,000 tons which at low rates would give $75,000.

The amount of through travel at $112,000 and that of way travel at $48,000.

Estimate of gross earnings is thus classified:

Way travel	$48,000
Freight	48 000
Through travel	112,000
Freight	195,000
Mails and express	12,000
Total	$415,000

Vermont.

Rutland and Burlington Railroad.—The fifth annual report of the Rutland and Burlington railroad company, submitted to the stockholders at the meeting of July 21, has just been published.

The total amount charged to construction to May 31, is $4,847,401 14, which has been provided from the following sources, viz:

Capital stock		$1,462,000 00
Preferred 8 per cent stock issued	$362,700	
On hand	137,300—	$500,000 00
Preferred 8 per cent stock		473,328 90
Bonds, 6 per cent		1,088,788 25
Mortgage bonds, 7 per cent		875,800 00
Interest		32,700 00
Notes payable		416,783 89
Total		$4,847,401 14

The earnings for the year have been $324,790 63 showing an increase of fifty per cent over last year, and the running expenses $159,450 91, leaving net earnings $165,339 72.

This is one of the mismanaged and unlucky Vermont roads. It is fast getting to be a good mate for the central Vermont road. The original stock in the Rutland road, will probably prove a dead loss, being eaten up by the amount wasted in construction, by extravagant shaves, and by the extravagant interest paid on preferred stock. We hope that no necessary fatality attaches to the Vermont roads, and that the Rutland and Central are not examples which must be followed by all others.

The Mobile and Ohio Railroad.

The city of Paducah has voted $200,000, and McCracken county $100,000, to the branch of the Mobile and Ohio railroad, which is to terminate at Paducah.

New Orleans, Jackson and Great Northern Railroad.

A railroad convention was held at Jackson, Miss., on the 30th of July, to aid in carrying forward this work. The proceedings are given at length in the Jackson Southern Star. Mr. Robb, the president of the company, was not present, as was anticipated, being detained by illness, Chancellor Cocke presided, and urged the claims of the road to the support of the citizens of Mississippi. The Hon. W. G. Kendall, the agent of the company, gave a sketch of the labors of Mr. Robb in behalf of the enterprise, especially in remodeling and reforming the municipal government of the city of New Orleans, by which new credit was given to the city and aid to the amount of $2,000,000 of bonds loaned to the company, to commence the road. Mr. K. stated that the engineers were already at work on lake Maurepas and that the route from New Orleans to the Mississippi would be under contract in the month of August. Col. S. W. Oak ey, of N. O., Gov. Foote, of Miss., and other gentlemen addressed the convention. A series of resolutions was passed pledging the meeting to the support of the road and to take all honorable means to secure the subscription of a sufficient sum to carry it through; likewise entreating the legislatures and citizens of the states of Mississippi, Louisiana, Alabama and Tennessee, to aid it as identified with the great cause of internal improvement.

The Star in a previous number ably advocated the merging of the Canton and Jackson road, with the N. Orleans, Jackson and Great Northern. The merger is urged principally on the the ground that under the present organization three or four years may elapse before the completion of the road, whereas under the New Orleans direction its speedy construction will be ensured. All the other local companies had been already consolidated.

Virginia.

A convention of the friends of Internal improvement is proposed to be held in the town of Union, Monroe county, Va., on the 19th inst, to derive means for advancing the system of improvements in Virginia.

South Side Railroad.—A meeting of the stockholders of this road as we learn from the Lynchburgh Virginian, was held at Petersburg, Va., on the 13th July last. A resolution was unanimously passed authorising the president and directors to issue not exceeding $800,000 of bonds for the purpose of completing the road as far as Lynchburg. Fifty-two and a-half miles of the road have been already constructed and in successful operation. Of the capital stock $1,164,145.80 has been already paid in, and expended, leaving $219,554 20 to be paid up, all which has been appropriated to the completion of the road as far as it is under contract. Twenty-three miles remain yet to be constructed in order to reach Lynchburg, the western terminus of the road. This enterprise will unquestionably be soon carried through, and the company are in earnest to complete the improvement to Lynchburg.

North Western, Parkersburg, Railroad.—The annual meeting of the North Western R. R. Co. was held at Parkersburg on the 5th August. Thomas Swann, Esq., the president of the Baltimore and Ohio railroad was unanimously chosen president. Mr. Cook, the late president resigned, and strongly urged the election of Mr. S. The committee charged with obtaining a subscription to the stock of the company to complete the amount ($500,000,) required as a preliminary to the loan of a million and a half of the credit of the city of Baltimore, did not report, but it is understood that very little stock remains to be subscribed.

Pennsylvania.

We learn from the Pottsville Mining Register, that Wm. B. Foster, Esq., is now engaged in a survey of the railroad contemplated from Philadelphia to the Lehigh river and the Delaware Water Gap. The corps of engineers have commenced operations at the Perkiomen creek above Norristown.

York and Cumberland Railroad.—A meeting of the stockholders of the York and Cumberland railroad company was held Lyre Hall, Baltimore on the 27th July, in which the ordinance of the council of that city guaranteeing the bonds of the York and Cumberland railroad company given to aid in the construction of the Susquehannah railroad was accepted. The vote on the resolution of acceptance was taken by shares, and resulted—for accepting the ordinance 5689 shares, against accepting—none. A committee was appointed to procure a certified list of stockholders, and a copy of the ordinance and supplement passed by the city council, and action taken to secure the assent or dissent of the stockholders thereto. Messrs. Michael Herr, Jos. C. Wilson, and Wm. F. Murdock were placed on this committee. Another committee consisting of P. H. Sullivan, Wm. E. May, Hon. Wm. H. Curtis, W. Woodville, and A. W. Fitzhugh Esqs., were appointed to enter into negotiations with the president and directors of the Baltimore and Susquehannah railroad company to procure the assent of the stockholders of that company to a covenant binding them to the acceptance of the loan, to be passed by the legislature of the state of Maryland, and to be approved by the Mayor and city council of Baltimore, and to issue $200,000 of the bonds of the company, the proceeds to be appropriated to the construction of a railroad to tide-water, and to the erection of depots and wharves.

Consumption of Gold.

The following curious statistics relative to the consumption of gold, were stated in a lecture lately delivered at the Geological society at London:

The entire amount of gold in circulation is said to be £48,000,000, of which the wear and waste is stated to be 3¼ per cent annually, or £1,680,000. The consumption of gold in arts and manufactures is as follows:

In the United Kingdom	£2,500,000
France	1,000,000
Switzerland	450,000
Other parts of Europe	1,600,000
United States	500,000
	£6,050,000

In Birmingham alone there is a weekly consumption of gold for chains only, amounting to 1000 oz. The weekly consumption for gold leaf in London is 4000 oz; in other places in Great Britain 184 oz.

One of the potteries in Staffordshire consumes £3500 worth of gold annually in gilding; and the whole consumption for gilding porcelain in England is estimated at about 8500 ounces annually.

Baltimore and Ohio Railroad.

The Fairmont True Virginian of Saturday says it is confidently expected that the railroad will be finished to Manington by about the first of next month. From Manington the Ohio river can be reached in about 38 miles. We should presume that in the course of two months, by laying the rails on this end, the staging from here to the road might be reduced to some 20 or 30 miles, and thus an easy and short connection made that would be of service.

Nashville and Cincinnati Railroad.

In the Journal of last week we noticed the organization of this road, and the election of President and directors. Stock was subscribed during a few days previous to the organization to the amount of $118,000. The following table exhibits the amount of taxable property and population of the counties in Kentucky through which the road will run:

	Value of taxable property.	Population.
Allen	$1,482,609	8,742
Barren	3,806,749	20,240
Green	1,953 811	9,060
Taylor	1,462,790	7,250
Marion	2,511,630	11,765
Boyle	4,619,043	9,116
	15,836,632	66,173
Mercer	4,735,234	14,067

Beloit and Madison Railroad Company.

This company was organized at Madison, Wis., on the 1st inst., and the following named gentlemen elected directors:

Messrs. John B. Turner, W. L. Newberry, E. S. Wadsworth and E. I. Tinkham, of Chicago.

Messrs. John M. Keep, Hazen Cheeney, and L. G. Fisher, of Beloit.

Messrs. Volney Atwood, Joseph A. Sleeper, and O. W. Norton of Janesville; and

Messrs. F. G. Tibbits, Simeon Mills and Edward Ilsley of Madison.

Subsequently, Mr. Turner was elected president: Mr. John B. Ilsley, chief, and Mr. Van Nortwich consulting engineer; Benjamin Durham of Beloit, secretary; Mr. Ed. Ilsley, of Madison, treasurer; and Mr. Tinkham, of this city, assistant.

It is the intention to commence the grading, bridging, etc., so as to have it ready for the iron by the time the Beloit branch of the Galena and Chicago road is finished, some time next year.

We regret to learn that the Hon. Christopher Adams, of New Orleans, died in Philadelphia, on the 28th of July last. Mr. Adams was President of the New Orleans and Opelousas railroad company.

Education.

The Rev. Dr. Murdock delivered a lecture before the New York teachers' association, held recently at Elmira, on the necessities created by the extension of railroads and telegraphs, for a corresponding dissemination among the masses, of education. It is clear that a higher moral culture must keep pace with scientific improvements and their application to the arts of life.

Elmira Car Shop.

THE Undersigned is prepared to manufacture for Railroad Companies, Passenger, Baggage, Cattle, Freight, Gravel and Hand Cars, also Baggage Barrows and Freight Trucks. WM. E. RUTTER.
Elmira, N. Y., Aug. 14, 1852. tf

LOW MOOR AXLES,

A SUPERIOR Article for Railroad Cars, supplied by the Manufacturers Agent- WM. BAILEY LANG, 9 Liberty Square, Boston.

Railroad Iron.

CONTRACTS made by the subscribers, agents for the manufacturers, for the delivery of Railway Iron, at any port in the United States, at fixed prices and of quality tried and approved for many years, on he oldest railways in this country.
RAYMOND & FULLERTON. 45 Cliff st

Railroad Iron.

1,000 TONS, 56 lbs. per lineal yard, shipped, and to be shipped, from London in July and early in August, T pattern and of best quality.
Apply to DAVIS, BROOKS & CO.,
31st July. 1m

To Contractors.

CENTRAL OHIO RAILROAD.

THE concluding day for the reception of bids for Grading and Masonry of the forty-one sections of this Road, extending from a point five miles east of Cambridge, towards the Ohio River, will be postponed from the 15th to the 20th instant, by which last named day, bids will also be received for the remainder of the line to Wheeling—embracing some eight or nine sections, and making in the aggregate forty-nine or fifty sections.

Bids for the *Whole Line* as well as by sections, for Cash alone, or Cash and Stock, will be duly considered.

ROBERT MCLEOD,
Chief Engineer.

Zanesville, August 2nd, 1852.

500 Tons of Wire Wanted.

PROPOSALS ARE INVITED by the undersigned, on the part of the NIAGARA FALLS INTERNATIONAL BRIDGE COMPANIES, for the construction of the Wire Cables of the Railroad Suspension Bridge, of 800 feet span, to be erected over the Niagara river, below the Falls, for the delivery of ONE MILLION of POUNDS of IRON WIRE, or any portion of it, not less than 100,000 lbs., at the site of the bridge, on the following conditions:

1. The wire is to be of No. 10 size, so that 20 feet will weigh exactly one pound.
2. The skeins to weigh no less than 18 lbs. An offer for 30 to 40 lbs. will be greatly preferred.
3. The wire must be finished with a lime coat, smooth and even, both ends of the same thickness.
4. It must be finished in three holes, or nearly as hard as spring-wire.
5. The iron must have been manufactured of the best quality of charcoal blooms, which will make hard wire of great elasticity, strength, fibre and toughness.
6. The blooms must have been manufactured of cold-blast charcoal pig, and not of anthracite pig, nor of hot-blast pig.
7. Satisfactory evidence will be required before hand of the quality of the iron, of which the wire is to be drawn.
8. The wire must be drawn on blocks of no less than 2 feet diameter.
9. It must be put up in bundles of 200 lbs., as near as can be done, without small skeins.
10. The wire is to be delivered in five equal portions during the months of May, June, July, August and September of next year.
11. On delivery, the wire will be examined and tested in the following manner:—Of every 5 bundles or 1,000 lbs. one skein will be selected, and suspended between two posts 400 feet apart, the one end attached to a capstan, by which it will be gradually hauled on until it breaks. The condition now is, that this wire must not break with a greater deflection than 9 inches, which is equivalent to 1,300 lbs., or 90,000 per superficial inch of solid wire section. If it stands this test, then further examination of that one thousand pounds, in respect to other qualities, will be continued; but if not, it will be rejected and placed at the disposal of the contractor.
12. As regards toughness and fibre, each end of a skein will be tested by bending it square over the jaws of a large pair of new and sharp pliers, and bending it back again. The wire must stand this test without the least sign of failure. Its hardness and elasticity will at the same time be examined by bending and swinging, also by hammering, filing and notching the ends, which forms part of the operation of splicing.
13. Such lots as have stood the various tests satisfactorily, will then be accepted conditionally, and 80 per cent of its full value will then be paid to the contractor in bankable funds.
14 The 20 per cent will be reserved for four months longer. Should in that time, during the construction of the cables, any more defective skeins be discovered, such skeins will be rejected and placed at the contractor's disposal, either broken or whole, oiled or not oiled, in such condition as they happen to be during the progress of the work. The value of such wire, together with the labor expended upon it, will then be deducted out of the 20 per cent reserved.
15. The undersigned, as the Engineer of the Bridge, will be the sole judge of the above tests; he will stand as an impartial umpire between the contractor and the Bridge Companies, and from his decision there shall be no appeal.
16. Proposals for imported wire will also be accepted. One-half or 500,000 lbs. will be used on the Canada side, and may be bonded, if imported by way of New York.
17. Proposals will be received until the 1st October next; they are to be directed to the undersigned at Niagara Falls, N. Y., and should be marked on the envelope, "*Proposals for Bridge Wire.*"
18. Those contractors, whose proposals are accepted, will be informed of the fact by mail before or on the 10th October next.

JOHN A. ROEBLING,
Eng. Niagara Falls R.R. Suspension Bridge.
NIAGARA FALLS, N. Y., August 5th, 1852.

Notice to Contractors for Masonry and Bridging.

ALABAMA AND TENNESSEE RIVER R. R.

PROPOSALS will be received at the office of the Alabama and Tennessee River Railroad Company, in Selma, Alabama, until the 15th September next, for the Masonry and Superstructure of "Coosa," "Waxahatchie," "Tallasseehatchie," "Talladega" and "Chockolocko" Bridges, and also for the other masonry required on 90 miles of this road.

The work comprises about 3,000 lineal feet of Timber Bridging and 20,000 perches of Masonry, and is situated in a healthy country, where materials, provisions and labor are abundant and cheap.

Plans and specifications may be seen, and all information will be furnished at the offices of the Engineer Department in Selma and Talladega, Alabama.

Satisfactory evidences of ability and responsibility will be required from those proposing for the work.

LEWIS TROOST,
Chief Engineer.

New York, August 3d, 1852. 5t32

Virginia Locomotive and Car Works.

Wolfe Street and River Potomac, Alexandria, Va.
SMITH & PERKINS, *Proprietors.*

MANUFACTURE

Locomotive Engines and Tenders.
Marine and Stationary Engines and Boilers.
Chilled Car Wheels and Axles.
Patent Chilled and Wrought Slip-tire.
Machinery and Castings generally.

The undersigned having erected very extensive shops, and procured the most modern machinery and tools, are prepared to execute orders for Locomotive Engines, Cars, and Machinery of all kinds with despatch, and on the most favorable terms.

R. C. SMITH,
Late of the Alexandria Iron Works.
THATCHER PERKINS,
Late Master of Machinery on the Balt. & O. R.R.
July 22 1851

Railroad Spikes.

WE would call the attention of Railroad Companies and Contractors to a superior article of Railroad Spikes, of our own manufacture, which for finish, durability and quality of Iron, are not equalled by any in the United States.

THACHER & SEARS,
79 State st., Boston.

N.B.—T. & S. are prepared to take contracts for the delivery of Spikes, at any port of the U. States.

Cotton Steam Packing.

THIS Superior Packing is prepared by us expressly for Locomotive Engines. The advantages resulting from its use are—cheapness—greater safety, and economy of labor.

Orders addressed to us at 91 Wall st., New York, will have prompt attention.

J. M. HALL & CO.

P. S.—Waste for cleaning engines, in quantities as wanted. July 24, 6m*

Norwich Car Manufactory.

FOR SALE.—Will be Sold at Public Auction, on the premises, on Monday, the twenty-third day of August, at 10 o'clock A. M., the entire establishment and property of the Norwich Car Manufactory, consisting of

1 Brick slate roof building, 50 by 150 feet, two stories high, used for setting up cars, cabinet work, &c.

1 Brick slate roof building, 40 by 190 feet, with two wings, 30 by 40 each, one story, used for blacksmith, machine and saw shops.

1 Brick slate roof Engine and Dry House, 30 by 40 feet.

1 Lumber House, 50 by 100 feet.

1 Barn, 18 by 28; 1 Wood Dwelling House, 21 by 28; one and a half stories high.

1 Block of Brick Tenements; several Building Lots.

Together with the Machinery, Tools and Fixtures connected with the same, consisting of a Steam Engine and Boilers; several Planeing and Sawing Machines, Turning Lathes, Boreing, Punching, Morticing, and a variety of other machines, constituting a complete and extensive establishment for the manufacture of Railroad Cars as any in the country, and capable of working one or two hundred hands, and doing a business of $200,000 per annum. It is situated on the Norwich and Worcester Railroad, half a mile from the city of Norwich, at the head of navigation on the River Thames—affording the most desirable facilities for the transportation of Cars and materials, and in the immediate vicinity of various and extensive manufacturing and mechanical establishments.

The whole, with the exception of the vacant lots, is leased on favorable terms for four years from February, 1850. For further information, application may be made to

J. G. W. TRUMBULL, Surviving Trustee.
Norwich, June 26, 1852. 6 w

Railroad Contracts.

THE Mobile and Ohio Railroad Company hereby offer for contract the *Graduation, Masonry* and *Bridging* of 179 miles more of their road, extending from Section 64 of the last *letting* in Wayne Co. to the south line of Pontotoc Co., Miss.—the latter point being 267 miles from Mobile.

The line will be ready for inspection on and after the first of August next. Also, plans, profiles and specifications will be exhibited, proposals received under seal, and contracts made at the following times and places, to wit:

August 15th—At Quitman, for line in Clarke County.
" 25th—At Lauderdale Springs, for line in Lauderdale and Kemper Counties.
September 5th—At Macon, for line in Noxubee County.
" 15th—At Major Gilmore's, 16th section on "Robinson" Road, for line in Lowndes County.
" 25th—At Doct. Gillespie's, on Aberdeen and Houston Road, for line in Monroe County.
" 30th—At Okolona, for line in Chickasaw County.

From July 25th to August 10th, the profiles can be examined, and other information obtained, of C. B. Child, Esq., Resident Engineer, at Macon, Noxubee Co., Miss.

The grading upon 8 miles of this line is heavy, and good car work. About 35 miles middling heavy, and the remaining 136 miles light.

The high and healthy country in which this line of work is situated, and the proposed *letting* of 250 miles more within twelve months, to complete the road to the Ohio and Tennessee rivers, for which subscriptions are now partly taken up, render this work worthy the attention of contractors both north and south.

JOHN CHILDE,
Chief Engineer and General Agent.
New York, June 14th, 1852.

TRUSTEE'S SALE

Of the Property, Personal and Real, of the

Maryland Mining Company,

In Alleghany County, Maryland.

—o—

By virtue of a decree passed by the Circuit Court for Alleghany county, as a Court of Equity, the undersigned, Trustees, will sell at public sale, at the Eckhart Mines of the Maryland Mining Company, ON THE FIRST DAY OF SEPTEMBER, 1852,

At Twelve o'clock, Noon,

All that Valuable Mineral Estate belonging to the Maryland Mining Co., and which said company has been improving for the last seven years, by the expenditure of a vast amount of capital.

The Real Estate consists of two Tracts of Land, called "THE MARYLAND MINING CO.," and "FOUNTAIN INN," located in one body, containing about

1900 Acres of Land,

a large part of which is underlaid by the

GREAT VEIN OF COAL,

14 feet in thickness, likewise by many other veins, varying in thickness from 2 to 4 feet, the whole located in the very heart of the Great Semi-bituminous Coal Fields of Maryland.

Also—Two other Lots or Parcels of Land, containing 50 acres each, known as LOTS NOS. 3970 and 3972; these Lots are heavily timbered, and are said to be underlaid by the GREAT VEIN, or 14 feet vein of coal.

Also—Lots Nos. 3401, 3402 and 3403, containing 50 acres each, and adjoining the tract called "*Maryland Mining Company*," and underlaid with the great vein of coal.

Also—One Lot called "HOOK-'IM IN," containing about 80 acres, situated on Braddock's Run, two miles below the village of Eckhart. This land is heavily timbered, with timber suitable for RAILROAD CROSS TIES and other purposes. Braddock's Run affords many excellent sites for Saw or other Mills on this property.

Also—Two Lots of Land on the Canal Basin and Potomac River, containing 19½ acres of land, being part of the bottom land of the ROSE HILL ESTATE, purchased by the Maryland Mining Company for a COAL DEPOT, and most eligibly situated for the purpose, and particularly described in a deed from Mary Lynn and others to the Maryland Mining Co., dated 19th of January and 2d February 1844, and recorded in Liber H. B. No. 1, folio 140. Each tract being on the slack-water navigation of the Potomac River. The Baltimore and Ohio Railroad passes through the whole length of both tracts.

Also—A Tract or Parcel of Land situated at the junction of Braddock's Run and Wills' Creek, containing about five acres, conveyed to the Maryland Mining Company by Joseph Dilley and Elizabeth his wife, by deed bearing date the 18th of February, 1841, and recorded in Liber A. B. No, C. C. folioes 29, 30, 31 and 32.

The two first Tracts of Land are divided into desirable FARMS, well watered and eligibly situated, and are in a high state of cultivation. The soil is good, and there is an immediate and certain market on the property in supplying the laboring population at the works with the products of the farm.

THE VILLAGE OF ECKHART MINES contains about 100 BUILDINGS of Wood, Brick and Stone, among them 1 Store house, 70 Dwellings, Machine Shop, Locomotive and Stationary Engine Houses, Carpenter Shops, Blacksmith do., Stables, Barns, etc., etc., all new and in the best repair. The village is situated near the centre of the property on the National Road, one and a half miles east of Frostburg; it is immediately convenient to the entrance of the Mines and affords accommodations to a population of 7 or 800 souls.

The Coal Mines are opened to be worked both by horizontal and slope workings, to an extent sufficient to meet the necessities of the largest coal trade. Besides the Eckhart Mines already opened, the Hoffman and other openings upon the property are eligibly situated to furnish vast amounts of coal on a very moderate outlay for improvements being made.

Also—A RAILROAD 9½ miles in length, from the Mines to a junction with the Mt. Savage Railroad by which a continuous line of transportation is provided to the Baltimore and Ohio Railroad Depot, in the town of Cumberland, and by a branch Railroad to the Chesapeake and Ohio canal The road is laid partly on cross ties with a rail weighing 62 lbs. per lineal yard, and partly with an edge rail weighing 38 lbs. per yard supported by string timbers and cross ties, the whole in good repair, and constant transportation passing over it, together with full and ample right of way for the same acquired by condemnation and purchase.

Also—A Brauch Railroad from the Mt. Savage Railroad about one mile in length to the property of the Cumberland Basin company in the town of Cumberland, said road being new and in the best order, laid with a heavy rail of 62 lbs per yard and large oak cross ties. The two roads above mentioned of the aggregate length of 9½ miles costing over $250,000

Also—A vast amount of personal property, for railroad and mine equipment, too numerous to mention in detail, but consisting in part of the following articles: 2 first class coal burning LOCOMOTIVE ENGINES, (Winans' make) weighing 23 tons each; 1 second class wood and coal burning do., (English make and American rebuild,) and weighing 15 tons; 1 second class, do., do, 12 tons; 30 iron coal cars; 11 Gondola coal cars; 5 coke cars; 14 platform lumber cars; 2 passenger cars; 170 mine cars for the mines; 1 superior turning lathe and other machinery, tools and implements for repairing engines and cars. Also, Horses, Carts, Oxen, Wagon and Farming Utensils, etc., etc., etc.

The revenues of the Railroad growing out of the transportation of coal and miscellaneous freight and from passengers, are more than enough to pay the interest on its cost and keep it in repair.

It is not possible in an advertisement of this kind to give a full description of the property in question, but the object of the undersigned will be effected if they shall be able by this means to call the attention of capitalists to this magnificent property, which contains within itself all the elements necessary to sustain a large mining and manufacturing business, villages erected for workmen, collieries open ready for working—Railroad and Canal communication with tide water, etc.

THE TERMS OF SALE as prescribed by the decree are, one fourth of the purchase money in cash on the day of sale, and the balance in three equal instalments of six twelve and eighteen months, with interest from the day of sale, the purchaser giving his notes or bonds with security to be approved by the Trustees, or the whole purchase money may be paid in cash at the option of the purchaser.

For further information apply to M. O. Davidson, Engineer and Superintendent, at the Mines, who will exhibit the property and explain its capabilities, or the undersigned Trustees,

GEORGE WM. BROWN,
Baltimore.
WILLIAM PRICE,
GEORGE A. PEARRE,
THOMAS J. McKAIG,
Cumberland, Trustees.

Notice is hereby given, pursuant to said decree, to the creditors of the Maryland Mining Company to file their claims with the vouchers thereof in the office of the Clerk of the Circuit Court for Alleghany county, within two months from the day of sale.

GEORGE WM. BROWN,
WILLIAM PRICE,
GEORGE A. PEARRE,
THOMAS J. McKAIG,
Trustees.

July 3, 1852.

To Contractors.

SEALED PROPOSALS will be received at the office of the Lackawana and Western Railroad Company, No. 45 Wall street, New York, until the 3rd day of September next inclusive, for the construction of a Tunnel, on the line of the Lackawana and Western Railroad, size 18 feet square, and about 2200 feet in length.

The excavation will be rock, of very favorable character for drilling and blasting.

The North end is open, and tunnelled about 100 feet. The earth excavation at the South end is now being made.

Parties desirous of bidding, can visit the work daily, via New York and Erie, and Lackawana and Western railroads, distance from Great Bend about 30 miles, and from Scranton, 18 miles.

☞ For further information, apply at No. 45 Wall street, or at the Company's Office in Scranton.

Bidders must bring satisfactory testimonials.

By order of the President and Dirctors,
GEO. W. SCRANTON, *General Agent.*

A. Whitney & Son,

PHILADELPHIA, PA.,

MANUFACTURERS of Chilled Railroad Wheels for Cars and Locomotives. Also furnish Wheels fitted complete on best English and American Rolled and American Hammered Axles. 31tf

Notice to Contractors.

SEALED PROPOSALS will be received at the Engineer's Office of the Marietta and Cincinnati Railroad, at Point Harmar, up to the 8th of September, inclusive, for the Graduation, Masonry and Bridging of 70 miles of this road, extending from the East end of the present contract in Vinton county to Marietta. This work is well worthy the attention of Contractors. There will be about 2000 feet of Tunnelling, with several deep cuts and high embankments. The line will be ready for examination eight or ten days prior to the day of letting. Plans, profiles and specifications will be found at the Engineer's office in Athens and Harmar, and all necessary information given upon the line of the road by the Resident Engineers.

Separate proposals will be received for the Masonry and Superstructure of the Bridge across the Muskingum at Marietta—this will be about 600 feet long and be furnished with a draw of 50 feet span.

W. P. CUTLER, President.
A. KENNEDY, Engineer.

Engineer's Office, M. & C. R. R.,
Chillicothe, July 16, 1852.

Notice to Contractors.

CHICAGO AND MISSISSIPPI RAILROAD.

SEALED PROPOSALS will be received at the office of the company in the city of Springfield, Illinois, until SATURDAY, August 14, for the GRADING, MASONRY, BRIDGING, and CROSS TIES of that division of this road which extends from Springfield to Bloomington, Illinois.

The distance is about sixty miles, and the route traverses the most elevated and healthy portion of the State.

The line is divided into sections of about two miles each, and the work is to be commenced without delay.

Payments for work and materials will be made in cash.

Profiles and plans may be seen and blank forms obtained at the office of the company in Springfield and Bloomington, Illinois, where any information will be furnished by the Engineer Department.

Satisfactory proof of responsibility will be required from those proposing for the work.

The subscriber will be in New York, at No. 68 Warren-st., up stairs, over Hudson River Railroad Office, until August 3; and will be prepared to exhibit profiles, plans, etc., and give information to such as prefer to offer proposals in this city.

New York, July 15, 1852.

OLIVER H. LEE,
Chief Engineer Chicago and Miss. Railroad.

To Contractors.

CENTRAL OHIO RAILROAD.

PROPOSALS will be received at the office of the Central Ohio Railroad Company, in Zanesville, until the 15th day of August next, for the Graduation and Masonry of 41 Sections of the Road, extending from a point five miles east of Cambridge, to within about six miles of the Ohio River, near Wheeling, Virginia.

The work upon the greater portion of this Division is very heavy, including several Tunnels and a large proportion of Masonry.

Bids proposing to receive a per centage of payments in the Stock of the Road, are desirable; though a favorable consideration will be given to proposals for entire cash payments.

Specifications may be obtained at the Engineers Office in Zanesville, and also in Cambridge and Wheeling, on and after the 21st inst.

ROBERT McLEOD,
Chief Engineer.

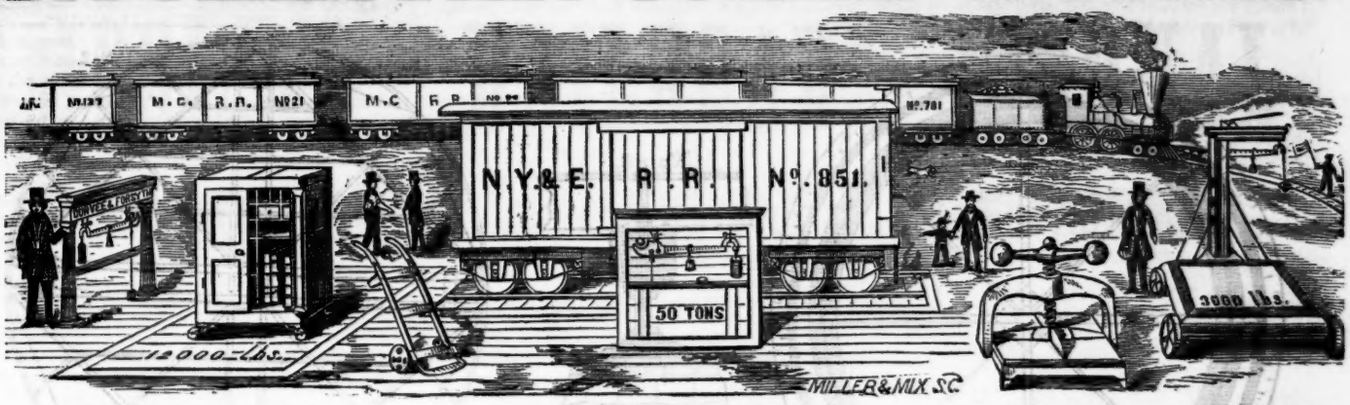
July 15th, 1852.

I. Dennis, Jr.,

WASHINGTON, D. C.,

ATTORNEY for Inventors, and Agent for Procuring Patents—Practical Machinist, Manufacturer and Draughtsman, of 20 years' experience. Circulars containing important information, with a map of Washington, sent to those who forward their address, and enclose a stamp. 31tf

ROCHESTER SCALE WORKS.



DEPOT SCALE, 6 TONS, AND FIRE KING SAFE. **TRACK SCALE, 100,000 LBS.** **RAILROAD MANIFEST PRESS.** **IRON SCALE, 1 1-2 TONS.**

DURYEE & FORSYTH, MANUFACTURERS, ROCHESTER, N. Y.

THE Subscribers are prepared to furnish upon order, RAILROAD SCALES of superior quality at *reduced rates*; Warehouse Trucks: Manifest Presses and Books; also, COVERT'S FIRE KING SAFE.

It has been decided by Scientific Gentlemen, that our Scales are preferable to all others, from the fact of their being made stronger and more substantial, more material used in the construction of the Levers, which renders them much safer and more durable.

OUR MOTTO is, to excel in the articles we manufacture; *therefore the best materials are used. The best model and plans are adopted*, to make them the most desirable for the market.

We wish it distinctly understood, that we use the best CAST STEEL in the bearing edges of our Scales, *although it has been otherwise reported by Messrs. Fairbanks' Agents.* We are ready at all times to test the merits of our Scales with any *honorable* competitor.

A large majority of the Track, Depot and Portable Scales in use by the New York and Erie Railroad Co. were furnished by us. Also, the Michigan Central Railroad is furnished exclusively with our Scales.

The facilities that we have for manufacturing with new and improved machinery, and the central position we occupy for shipping to the different markets, enables us to reduce the price of our Scales 10 to 15 per cent from former prices.

Our Mr Duryee has had over twenty-one years practical experience in manufacturing. The work being under his charge furnishes a sure guaranty of the superiority of our wares. All orders will receive prompt attention. DURYEE & FORSYTH.

GENERAL DEPOTS:

Wm. T. Pinkney, Jr.,	Agent,	166 Pearl st., N.Y.
Raymond, Ward & Co.,	"	Chicago, Ill.
Crawford & Reynolds,	"	Cleveland, Ohio.
Joseph E. Elder,	"	St. Louis, Mo.
Byram, Miller & Shreve,	"	Louisville, Ky.

The following Railroads have been furnished with our Scales and Wares, exclusively or nearly so:

New York and Erie,	Cleveland and Columbus,
New York and Harlem,	Michigan Central,
New York and N. Haven,	Mad River and Lake Erie,
Sandusky, Mansfield and Newark,	Paterson and Hudson R.,
Indianapolis and Bellefontaine,	Cincinnati, Hamilton and Dayton,
Syracuse and Utica,	Buffalo and Rochester,
Columbus and Xenia,	Rochester and Syracuse,
Lexington and Frankfort,	Louisville and Frankfort,
Hillsboro' and Cincinnati,	Chicago and Galena,
Greenville and Miami,	Dayton and Western,
Cayuga and Susquehanna,	Central Ohio,
Rome and Watertown,	Chemung,
Rutland and Washington,	Illinois Coal Company,
Erie and State Line,	Buffalo and State Line,
Rochester, Lockport and Niagara Falls,	Cleveland and Pittsburg,
	Michigan Southern,
	American Express Co.,

The Hon. Canal Commissioners, and Engineers of the Erie Canal Enlargement.

—

Michigan Central R. R. Office,
Detroit, May 10th, 1852.

MESSRS. DURYEE & FORSYTH,
Rochester, N. Y.,

Gentlemen: We have in use upon our road nearly one hundred of your Scales, comprising most of the sizes ordinarily in use upon railroads, many of which have been in service four or five years.

They have kept in adjustment well, retain their sensitiveness, and we regard them as strong, accurate, reliable, and in every respect satisfactory.

Respectfully yours,
J. W. BROOKS, Supt.

—

New York and Erie Railroad,
Supt's Department Gen'l Freight Office,
New York, June 21st, 1852.

TO MESSRS. DURYEE & FORSYTH,
Rochester,

Gents: This company have had in use on their road for three years past about fifty of your Railroad Track, Depot and Portable Scales. It affords me much pleasure to assure you that I consider them fully equal to any scale in use on the road, in point of strength, durability, accuracy and finish.

I am very respectfully, your ob't serv't,
SAM. BROWN, Gen'l Freight Ag't.

—

The following Report was made by the Hon. Canal Commissioners of the Erie Canal Enlargement, to the Legislature of the State of New York, Feb. 3d, 1852.

WEIGH LOCK SCALE.

It is but justice to say that the new Weigh Lock at Rochester abundantly sustains the reputation claimed for it by its worthy and scientific builders.

Messrs. Duryee & Forsyth have constructed for this lock, scales of superior power, and may well challenge comparison with any similar work in or out of the State. The mode of adjustment is so easy and simple, that great certainty is secured in determining large or small weights.

Report on Duryee & Forsyth's Weigh Lock Scale, by the Committee of the State Agricultural Society.

The Committee appointed to examine the Weigh Lock Scale in the City of Rochester, manufactured by Messrs. DURYEE & FORSYTH, of said city, have performed the duty assigned them, and report that they regard it as an admirable piece of mechanism, which reflects great credit on the builders. Length of Scale, 80 feet; width, 20 ft.; height, 32 ft.; weight of scale, 75 tons: capacity of weighing 400 tons.

Considering the weight and strength of the materials used, the delicacy and accuracy of this apparatus for weighing loaded canal boats of the largest class, this scale excites universal admiration. One of the committee tested it when under the pressure of a weight of 219 tons 900 lbs., and it clearly indicated a small additional weight within five pounds.

Any description of this Scale would hardly be intelligible without drawings, which the committee have not at command. It has no equal known to the committee. They recommend that a GOLD MEDAL be awarded to DURYEE & FORSYTH, for the manufacture of an article so important to the protection of the revenue of the Erie canal, and to the accurate weighing of an incalculable amount of private property.

C. DEWEY,
DANIEL LEE.

Rochester Sept. 20th, 1851.

—

We have received the Society's FIRST PREMIUMS, DIPLOMAS AND SILVER MEDALS, annually, since 1848, for the best Scales and exhibition. We have also received the DIPLOMAS and SILVER MEDAL of the American Institue, New York, and DIPLOMA of the Mechanics' Fair in Boston. Also, the HIGHEST PREMIUMS IN MONEY and DIPLOMAS of the Provincial Fairs, Canada, and State Fairs in Ohio and Michigan.

$200,000 SEVEN PER CENT. CONVERTIBLE BONDS OF the NEW-CASTLE and RICHMOND RAILROAD.—The undersigned offer for sale TWO HUNDRED SEVEN PER CENT CONVERTIBLE BONDS for $1,000 each, of the NEW-CASTLE and RICHMOND RAILROAD COMPANY, with Interest Coupons attached, payable semi-annually at the office of the Ohio Life Insurance and Trust Company, in New York. The Bonds are payable at the same place in fifteen years and are convertible into the stock of the company within five years.

These Bonds are secured by a mortgage executed by the Company to George Carlisle, of Cincinnati, and Joseph B. Varnum of New York, Trustees of the road from Richmond in Wayne County, to New-Castle in Henry County, including the superstructure, iron rails, depots, tolls, privileges and franchises of the Company. This mortgage is the FIRST AND ONLY LIEN upon this section of the Road, which is a part of the great Trunk Railroad from Cincinnati to Chicago.

The New-Castle and Richmond Railroad extends from Richmond to Logansport, 103 miles, the whole of which is under contract, and about one thousand hands are now employed on the road.

The total amount of stock subscribed upon the whole road is $509,400. The stock applicable to the construction of the road from Richmond to New Castle is $250,900.

This railroad passes through the most fertile, populous and highly improved part of Ohio and Indiana, and it must become the great route for freight and travel between Cincinnati and Chicago and the Northwest.

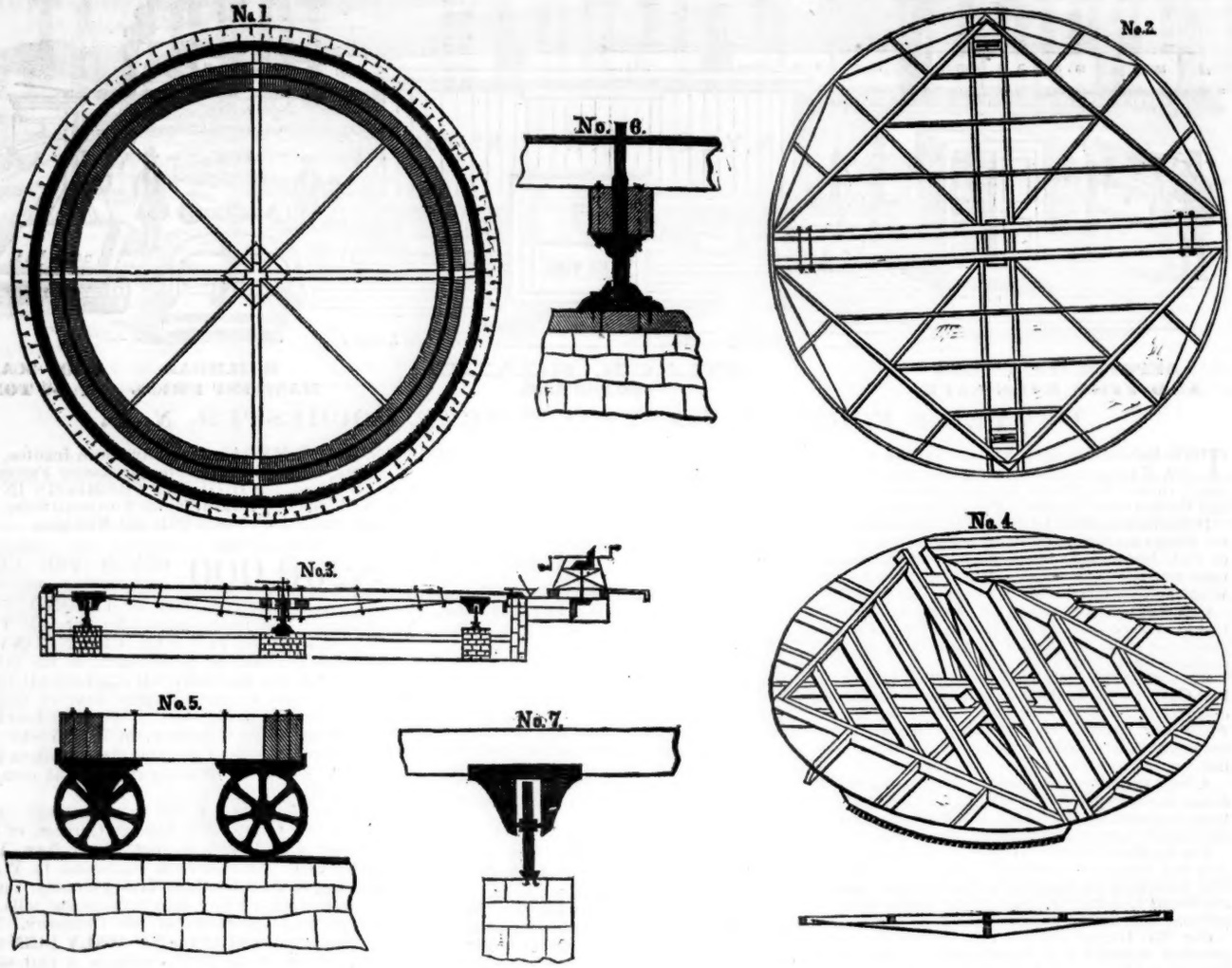
The local business alone would be sufficient to make the road profitable. The counties of Indiana through which it runs produce annually more than two millions of bushels of wheat, five millions of bushels of corn, one hundred and fifty thousand hogs, and fifteen thousand cattle, a large part of which must be transported to market on this road.

The iron rails for more than fifty miles of the road have been purchased. Ten miles of the road, from Richmond to Washington, will be completed and in operation in November next, which will make a continuous railroad of about 70 miles from Cincinnati, by way of Hamilton, Eaton and Richmond.

The holders of the bonds will have for their security the obligations of the company, with subscriptions of stock to the amount of more than half a million of dollars, and a mortgage upon the road from Richmond to New Castle, with the iron rails, superstructure, tolls and franchises of the company.

CARPENTER & VERMILYE, 44 Wall-st.
CAMMANN WHITEHOUSE & Co., 56 Wall-st.

CARHART'S IMPROVED TURNTABLE.



THE Patentee of the improved Turntable solicits an examination of its merits by Railroad Companies. It has been in use on the Hudson River Railroad during the last three years, since which, some improvements have been made upon it. The Patentee is now putting down the fifth table on the Ohio and Pennsylvania Railroad, where these tables have been in use for one year past. The *chief merits* of this Turntable are that it is capable of being turned by two men, with an engine and tender upon it, weighing thirty-five tons, in the space of two minutes. Its cost, including all material, the best kind of workmanship in wood, iron and masonry—except excavating the pit and laying the track—is only *thirteen hundred dollars*, and all repairs, except the ordinary wear and tear, will be guarantied for the sum of five dollars a year, for three years.

Figure 1 of the above cut represents the foundation, consisting of the bank and track walls; centre pier, cross-timber for bolting the step of pivot to. The track, which is spiked and leaded into the coping of the wall, the latter being composed of stone 2½ feet square. The Bank wall is 5 feet high and 20 inches thick, with cut and hammered dressed stone coping laid in lime and sand. Fig. 2 shows the carcass framing. Fig. 3 gives a side view of one main truss, with the mode of gearing, including rack and pinion. Fig. 4 gives a perspective view of rim and segments. Fig. 5 an end view of the main trucks with pedestals and wheels. Fig. 6 screw for pivot, 6 inches in diameter, running to the top of the table, with the lever for adjustment. Fig. 7 shows the cross section of the track wall, wheel and pedestal.

For further particulars please address the subscriber through WM. W. PRATT, Jersey City, N. J.

June 19th. D. H. CARHART.

New York and Canada.

The attention of Merchants, Traders and travellers, is directed to the facilities now afforded for the conveyance of freight and passengers direct from this city to Montreal.

The Champlain and St. Lawrence Railroad Company having opened their road from Rouse's Point to South Montreal, the only link before wanting to connect New York with Montreal by a continuous railroad, has been supplied.

Passengers leaving New York in the morning, sleep comfortably on the way, and arrive at Montreal at half-past four the following afternoon, reducing the travelling time to little more than twenty hours.

Freights are carried with the greatest care and dispatch, at greatly reduced rates.

After the opening of navigation, passengers will be conveyed from one city to the other by day light.

New York, Feb. 13, 1852.

CORROSIVE SUBLIMATE.

THIS article now extensively used for the preservation of timber, is manufactured and for sale by POWERS & WEIGHTMAN, manufacturing Chemists, Philadelphia.

Jan. 20, 1849.

To Telegraph Companies.
TELEGRAPH WIRE.

ORDERS taken for all numbers of best quality of English Telegraph Wire. Samples at the office of the Subscribers. JEE, CARMER & CO.,
6m*14 75 Broad st., New York.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK, Troy, N. Y.
or, MOORE HARDAWAY, Richmond, Va.
March 6. 1850.

Dudley B. Fuller & Co.,
IRON COMMISSION MERCHANTS,
No. 139 GREENWICH STREET,
NEW YORK.

Smith & Tyson,,
IRON COMMISSION MERCHANTS,
BALTIMORE.

REFINED Juniata Charcoal Billet Iron for Wire.
Do. for Bridging, of great strength.
Flat Rock, Boiler and Flue Iron, rolled to pattern.
Elba, Wheel Iron of great strength and superior chilling properties. Elba Forge Iron, American Shot Iron, Cut Nails, Spikes and Brads, Nail and Spike rods, Railroad Spikes of superior quality, Wrought Chair plates of any pattern, punched or plain.

M. B. Hewson, *Civil Engineer.*
(Open to a New Engagement,)
Memphis, Tenn.